

AN ANALYSIS of PERSON-RELATED, ENVIRONMENT-RELATED, and
SCHOOL CONTEXTUAL FACTORS ASSOCIATED with a BEHAVIOR-RELATED
FACTOR of TEACHER VICTIMIZATION by STUDENTS

by

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Abstract

The problem of teacher victimization by students (TVS) was investigated in this study. The theoretical approach employed was rooted in Bandura's Social Cognitive Theory (SCT) which involves Triadic Reciprocal Determinism among elements of Behavior, Person, and Environment. The two main purposes of this study were (a) to find out if selected survey items supported factor constructs of Behavior, Person, and Environment and (b) to determine if person-related, environment-related, and school contextual factors predicted a behavior-related factor. In the current study, the behavior-related factor was TVS. The person-related factor was named Student Academic Orientation. The environment-related factor, which measured Limitations on schools' efforts to reduce or prevent crime within their buildings, was composed of four factors which were named Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students. Additionally, the three school contextual factors included in the final analysis were Level of Instruction, Size (as measured by student enrollment), and Locale (urbanicity).

Data were analyzed from a sample of 2,560 principals who completed the School Survey on Crime and Safety (SSOCS 2008). Frequencies of TVS in over 80,000 U.S. public schools were estimated. Measurement as well as structural models were employed to test the study's five hypotheses. In the measurement models, selected survey items successfully loaded onto their three respective factor constructs; thus, support was found for the first set of hypotheses. Regarding the structural models, Hypothesis Two was supported; greater Student Academic Orientation significantly predicted, with a small

effect size, less frequent occurrences of TVS.

Support was found for the third set of hypotheses. These tested the relationships between four environment-related factors of limitations on schools' efforts to reduce or prevent crime in their buildings and frequencies of TVS. The effect sizes were medium for two of the environment-related predictors, Lack of Support and Lack of Resources, and small for the other two environment-related predictors, Fear and External Policies on Disciplining Students.

Partial support was found for Hypothesis Four. Lower Student Academic Orientation, a person-related factor, in combination with greater limitations on schools' efforts to reduce or prevent crime, arising from two environment-related factors of Lack of Support and Lack of Resources predicted with a medium effect size, more frequent TVS.

Partial support was found for Hypothesis Five. Lower Student Academic Orientation, a person-related factor, and Lack of Support, Fear, and Lack of Resources, three environment-related factors, significantly predicted increased frequencies of TVS, a behavior-related factor. The environment-related factor, External Policies on Disciplining Students, was not a significant predictor of TVS. Overall, the contextual variables of school Level of Instruction, Size, and Urbanicity were significant predictors of TVS in schools which experienced average limitations on their efforts to reduce or prevent crime and which had average levels of Student Academic Orientation. Concerning Level of Instruction, elementary and combined schools, but not middle, had significantly lower frequencies of TVS than high schools. Generally, schools with more

than 1,000 students had higher frequencies of TVS as contrasted with schools with less than 1,000 students. Generally, urban schools had higher frequencies of TVS as contrasted with suburban, small town and rural schools. The effect size for this structural model which tested the fifth hypothesis, with all the variables combined, was large.

Theoretical and policy implications of the findings were noted. Limitations of the study were discussed. Recommendations for future research were made.

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Dr. Michael Rosenberg

Dedication

I dedicate this work, and humbly offer it in thanksgiving, to the glory of
Almighty and Merciful God.

I pray that all of God's children may learn to live together in peace.

Acknowledgments

I thank my parents and first teachers...

Jacqueline & Benjamin Washburn

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Susan Washburn, Sister

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I thank the dissertation committee...

Dr. Deborah Carran, Chair

Dr. John Castellani

Dr. Christina Harnett

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Dr. Edward Pajak

Dr. Michael Rosenberg

I thank the many teachers and professors, unnamed here, who have contributed to my lifelong learning adventure.

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Chapter One: Introduction

The goal of this chapter is to introduce the problem of teacher victimization by students. The chapter is organized into several main sections. First, critical background information is presented as a means to establish context. Second, the specific problem of teacher victimization is described. Third, an approach to the problem of teacher victimization is presented. Finally, the chapter concludes with the hypotheses to be addressed in the study.

Background

Student misbehavior in U.S. public schools is not a new problem. At least for the last several decades, this issue has been a pressing concern. For example, Kafka (2009) wrote, “The image of schools as hotbeds of delinquency was depicted for the general public in the 1955 film *Blackboard Jungle*, which portrayed urban high schools as war zones with criminal students and incompetent and indifferent staff” (p. 329). Although recognized as problems long ago, student crime and indiscipline still remain challenges in certain American public schools (Wynne & Joo, 2011). Of the many misbehaviors in which students engage, some of them are merely obnoxious (e.g., cursing). Others are potentially illegal, depending upon the specific circumstances (e.g., bullying). Still others are illegal per se (e.g., sexual harassment and vandalism).

Currently, much attention has been focused upon one particular area of misbehavior in schools; that is, victimization of students committed by other students.

Considerable notice has been given to cruelties such as bullying and sexual harassment (e.g., Wang, Iannotti, & Nansel, 2009). These problems can occur with high frequency, particularly in middle schools (Neiman & DeVoe, 2009). Some individuals with disabilities are particularly vulnerable to bullying (Rose, Monda-Amaya, & Espelage, 2011). So too are some young people who have relatively low or high body weights, as compared to their peers (Wang, Iannotti, & Luk, 2010). The problem of student victimization by other students is worthy of much concern and study because, for example, there is an inverse relationship between middle school student victimization and scholastic achievement (Juvonen, Yueyan Wang, & Espinoza, 2011). There exists, however, a related problem currently receiving less attention, but which is nearly equally distressing. “Not just students, but also teachers are threatened by crime in schools” (Cook, Gottfredson, & Na, 2010, p. 318). The next section of this chapter addresses the significant topic of teacher victimization by students (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005).

The Problem of Teacher Victimization by Students

What is teacher victimization and why is it a problem? Broadly speaking, victimization of teachers can take many forms; it can include verbal threats, physical attacks, theft or destruction of personal property, and persistent disruptions to instruction. Victimization is a problem to teachers for several reasons. Not only can it be physically dangerous, but it also can be psychologically perilous (Gerberich et al., 2011). Victimization can lead teachers to experience distressing emotions such as fear. This includes fear for the safety and well being of students in the classroom as well as fear of injury to one’s self. Teacher victimization also can lead to frustration which is often a

precursor of anger. Another undesirable consequence is stress (Kyriacou, 2001), which has physical as well as psychological consequences (Kudielka, Bellingrath, & Von Känel, 2008; Ritvanen, Louhevaara, Helin, Väisänen, & Hänninen, 2006; Tsai, Fung, & Chow, 2006).

Still another undesirable outcome is a feeling of inadequacy. Teachers who are precluded by disruptive pupils from delivering thoughtfully prepared lessons can feel ineffective and can lose confidence in their abilities. This can be particularly deleterious to new teachers. As Gavish and Friedman (2010) noted, “Students’ disrespect for teachers, their disregard for the teacher’s authority, and the absence of harmonious relations with students, may contribute to the deepest feelings of unsuccessfulness and professional failure, as well as acute feelings of worthlessness” (p. 162). Victims also may experience anxiety over damage to their teaching reputations. Accordingly, it is not surprising that victimization can make teachers want to transfer out of their assigned schools for better placements, or leave the profession.

Teacher victimization also results in schools having bad reputations, a situation that makes it difficult to recruit capable teachers and retain proficient veteran teachers (Brill & McCartney, 2008). This situation reduces the quantity and quality of instruction within the affected school. Quantity is reduced because if teachers feel bad, then they are at risk of higher absenteeism and attrition. Quality is diminished because teachers are at risk of “presenteeism” a condition wherein workers show up for their jobs, but do not function adequately (Koopman et al., 2002, p. 14). A dilemma related to this is the problem of compassion fatigue. Figley (2013) explained that “compassion fatigue is identical to secondary traumatic stress disorder (STSD) and is the equivalent of PTSD”

(p. xv). By extension of Figley's work, not only would teachers who are victimized suffer, but their students also would be at risk for problems. The reason for this is that under the traumatizing circumstances, although teachers would be the people who experienced the primary stress of being victimized, students through their proximity to the teachers would be concomitantly affected.

Thus, there are several undesirable outcomes for those teachers and other educators who experience victimization, as well as for their students. McManus (2013) captured the essence of this predicament when he asserted that "the menacing costs of *stress*, *burnout*, and *compassion fatigue* are a tragic tax to those who begin their teaching careers with the noble intention of helping others, to their students, and to the education community as a whole" (p. 9, emphasis added).

A Problem of Limitations on Schools' Efforts to Reduce or Prevent School Crime

A problem related to teacher victimization by students is that of limitations on schools' efforts to reduce or prevent crime on their grounds. Several obstacles can impede schools' efforts along these lines. Challenges to reducing school crime can include, but are not limited to, the following.

Lack of teacher or parent support for school policies. Students generally feel better about themselves (i.e., they have greater subjective well-being) when they believe that they are supported by their teachers (Suldo et al., 2009). In environments where teachers do not support school policies, or they do not carry these policies out consistently, students might feel less supported by their teachers.

Fear of lawsuits or of student retaliation. In schools where teachers fear litigation for breaking up (or, conversely, failing to break up) student fights (Holben,

Zirkel, & Caskie, 2009), this is a problem. The same is true for schools where teachers fear retribution from students for disciplining them.

Inadequate financial resources. It is common knowledge that school districts vary greatly in their per pupil expenditures. Thus, inadequate funding is a perennial dilemma for some schools.

Potentially burdensome policies originating from federal, state, or local authorities. When schools feel overwhelmed or overburdened by federal, state, or local policies regarding disciplining students, this is a quandary also.

These are all situations wherein schools experience limitations on their larger efforts to reduce or prevent crime in their students' learning environments. These limitations presented above conceivably could be related, in some yet to be researched way, to a problem of teacher victimization by students in the very same aforementioned schools.

Accounting for Student Academic Orientation

“Viewed as outcomes, achievement and behavior are related; viewed as causes of each other, achievement and behavior are unrelated” (Algozzine, Wang, & Violette, 2011, p. 13). The current study does not address academic achievement per se, but rather students' orientation toward it. Specifically, this refers to issues such as percentages of students who consider academic achievement to be important, who are likely to go to college, and who score low (or not) on standardized tests. These issues are important because what students think and how they feel about academic achievement can affect how they conduct themselves in their interactions with their teachers (McNair & Johnson, 2009). For instance, it seems improbable that students who value academic achievement

would be likely to verbally abuse, disrespect, or engage in widespread disorder within the classrooms of the very teachers who are endeavoring to instruct them.

The relationships among student academic orientation, limitations on schools' efforts to reduce or prevent school crime, and school contextual factors with teacher victimization by students are the essence of the current study. The next section discusses the transition from theory into practice.

From Theory into Practice

The ultimate goal of applied research is to find solutions to problems. To achieve these solutions, there must be a logical transition from theory to practice. Indeed, the connection between theory and practice is one of the most important aspects of this type of research. Use of a survey instrument is one way to effect this connection. A survey of schools sampled from the larger population of U.S. public schools could measure, albeit imperfectly, quantified elements of the theory. These quantified elements subsequently could be analyzed statistically—all the while taking into account the influence of larger contextual factors. Then, inferences could be made about the larger population of schools and the utility of the theory as it pertains to them. Based upon this work, educational policies and practices ultimately could be developed, refined, or renovated for the benefit of all who are involved in public school education.

There are numerous possible approaches for addressing the problem of teacher victimization by students. The approach to be employed in the current study is discussed below. First, theoretical underpinnings of the approach will be introduced. Then, empirical analysis of the application of this theory to the problem will be detailed.

Theoretical underpinnings. Since there are several deleterious effects that arise from teacher victimization, it becomes clear that an effective theoretical approach to solving the problem is in order. Behaviors occur within a myriad of unique situations. Psychoanalytic theories, consequently, are too person-oriented to be applied in the current study. This is because psychoanalytic theories do not adequately account for the role of the environment regarding behavior.

Cook, Gottfredson, and Na astutely observed, “A threatening environment is not conducive to academic success” (2010, p. 318). Thus, it is important to investigate teacher victimization by students through evaluating the environment in which it is perpetrated. One theory that, presumably, would permit this is Bronfenbrenner’s Ecological Theory of human development (1977). Its drawback for application within the current study, however, is its lack of attention to the individual’s attitudes, perceptions, and thinking (i.e., his or her cognition).

A theoretical approach that does take into account the cognitions of a person who engages in a particular behavior, as well as the environment in which that behavior occurs, is Social Cognitive Theory. Figure 1 shows a diagram of Bandura’s (1977, 1986) Social Cognitive Theory of Triadic Reciprocal Determinism. To be further elucidated in Chapter Two, the important point to remember is that each element, specifically—the behavior, person, and environment, affects the other. That is why each arrow that connects each element is double-headed. Thus, the person can affect the behavior. The behavior can affect the person. The environment can be affected by, and can affect, the behavior and the person.

Social Cognitive Theory applied to the problem of teacher victimization.

Relationships among the three factors of Behavior, Person, and Environment as presented in Figure 1 will be discussed in the following sections. The outcome factor of Behavior, in the current study, will be examined first. Then, two predictor factors, which in this study are Person and Environment, will be mentioned.

Outcome factor: Behavior. The behavior under investigation in this study is frequency (i.e., Daily, Weekly, Monthly, Occasionally, and Never) of teacher victimization by students. This factor could manifest itself as verbal abuse of teachers, disrespect toward them, and disorderly conduct in their classrooms.

Predictor factor: Person. The Person Factor in Figure 1 is one of the predictors of teacher victimization. Persons who engage, to varying degrees, in teacher victimization behavior are the students. They hold innumerable thoughts, feelings, attitudes, and perceptions about their daily school experiences. Out of this accumulated assortment of thoughts, feelings, et cetera one particularly important item is students' cognitive orientation toward their academic achievement. There is at least an indirect relationship between student achievement and school disorder (Chen & Weikart, 2008). The current study does not measure academic achievement directly; rather it measures a factor construct named student academic orientation. Indicators of this construct could include variables that measure percentages of students who think that academic achievement is important, who are likely to go to college, and who do (or do not) score low on standardized tests.

Predictor factor: Environment. Another predictor of teacher victimization shown in Figure 1 is the Environment Factor. Within the student's environment—the

school—there exists an ambience or climate. As a part of this climate, there are limitations to varying degrees upon the school's efforts to reduce or prevent crime and create a safe learning environment. An example of such limitations could include lack of support by parents and teachers for school policies. Another example might be the effect of federal, state, and local policies on disciplining students.

Empirical Analysis of the Problem of Teacher Victimization

School Survey on Crime and Safety. The results to be analyzed in this study are from the instrument, *School Survey on Crime and Safety, 2007-08 School Year, Principal Questionnaire* (SSOCS; National Center for Education Statistics, 2008). To be further described in Chapter Three, the SSOCS was created by the National Center for Education Statistics (NCES). Prior editions of the survey have been administered in the years 2000, 2004, and 2006. Sent to principals in the spring semester of the school year, SSOCS samples over 2,500 schools. By applying sample weights provided by NCES, estimates of information regarding school crime and safety, for over 80,000 schools across the nation, are possible.

Structure of the data. NCES employed stratified sampling techniques in the creation of the SSOCS. Each stratum is a composite created by NCES which was used to stratify the population of U.S. public schools for survey sampling purposes. An individual stratum consists of a combination of three school contextual variables: (a) grade levels of instruction, (b) student enrollment size, and (c) locale of the school. There are four grade levels of instruction including elementary, middle, high, and combined-grades schools which are coded 1-4, respectively. Also, there are four levels of student enrollment size which include less than or equal to 300, 500, or 1000 and

greater than 1000 which are coded 1-4, respectively. Finally, there are also four levels of locale of the school including urban, suburban, small town, and rural which are coded 1-4, respectively. The assorted combinations of these variables create a factor that contains over 60 strata categories. An example might be a middle school, with less than or equal to 1000 students, in a rural locale. That specific stratum would be coded 2-3-4.

In the current study, data are structured in the following way. Individual schools are nested within their unique stratum. The important point to understand is that the three specific variables of school grade levels of instruction, school size, and school locale, which compose the strata factor, have been identified in prior research (Miller, 2003) as being associated with school crime.

Undesirable Consequences and the Need for Research

As noted at the beginning of this chapter, student misbehavior has been, and continues to be, an important issue in U.S. public schools. Arising from the more serious types of student problem behaviors are several undesirable consequences. First, dangerous conduct can lead students, faculty, and staff to feel unsafe (Booren, Handy, & Power, 2011; Bosworth, Ford, & Hernandez, 2011). Second, student discipline problems are related to teacher burnout (Chang, 2009; Kokkinos, Panayiotou, & Davazoglou, 2005). Third, problems of misbehavior interrupt instruction for other students in the class. Fourth, student discipline problems waste taxpayer money and, consequently, are at least indirectly financially burdensome. In summary, student misbehavior contributes to a negative school climate (Grayson & Alvarez, 2008) and takes from society by producing undereducated citizens.

Within this broad topic of student discipline problems, one area that has not received much research attention is teacher victimization by students. There are many detriments arising from this problem, but the main points are that teacher victimization can be dangerous and it interrupts instruction. Over a half century ago, Bandura and Walters (1959) posited, “Probably, the surest way to prevent a child from learning the efficacy of aggressive patterns of behavior is to make every effort to *control aggression from the start by not allowing it to occur*” (p. 94, emphasis added). If teachers are experiencing verbal abuse, disrespect, and disorder in their classrooms, then one can be certain that their students are not learning adequately and are probably very unhappy. For students to receive the best instruction possible, educational environments which are conducive to effective teaching and learning must be in place. “All children deserve access to effective educational settings that are predictable, positive, consistent, safe, and equitable” (Skiba, et al., 2011, p. 104). Schools wherein teacher victimization occurs regularly are the antithesis of the aforementioned learning environments. Thus, it is important for teachers, parents, administrators, teacher-educators, policy makers and everyone else interested in equitable public school education to ensure that schools are safe crime-free places to teach and learn. By discovering which hindrances such as limitations on schools’ efforts to reduce and prevent crime in their buildings predict frequencies of teacher victimization, we come closer to achieving this ideal situation.

Purpose of the Current Study

It was posited in this chapter that teacher victimization, committed by students in U.S. public schools, is an understudied problem. It was also put forth that student behavior toward teachers is affected by a myriad of competing influences. Bandura’s

(1977; 1986) Social Cognitive Theory involving elements of behavior, person, and environment was presented as a useful theoretical approach to understanding human behavior. Additionally, the important role of school contextual factors was explicated. Therefore, the purpose of the current study is to determine if one person-related factor, multiple environment-related factors, and three contextual factors statistically significantly predict one behavior-related factor. More specifically, the person-related factor is student academic orientation. The environment-related factors are limitations on schools' efforts to reduce or prevent crime. The contextual factors are school level of instruction, school size, and school urbanicity. The behavior-related factor is teacher victimization by students. Following are the specific hypotheses to be addressed in this study.

The Hypotheses

Hypothesis One. If selected survey items are analyzed, then three major construct factors will be identified.

Hypothesis 1.1. If selected behavior-related survey items are analyzed, then a construct factor of teacher victimization by students will be identified.

Hypothesis 1.2. If selected person-related survey items are analyzed, then a construct factor of student academic orientation will be identified.

Hypothesis 1.3. If selected environment-related survey items are analyzed, then construct factors of limitations on schools' efforts to reduce or prevent crime within their buildings will be identified.

Hypothesis Two. If schools have higher percentages of student academic orientation, then they will experience lower frequencies of TVS.

Hypothesis Three. If schools have greater limitations on their efforts to reduce or prevent crime within their buildings, then they will experience higher frequencies of TVS.

Hypothesis 3.1. If schools have greater limitations, arising from lack of support for school policies, on their efforts to reduce or prevent crime then they will experience higher frequencies of TVS.

Hypothesis 3.2. If schools have greater limitations, arising from fear, on their efforts to reduce or prevent crime then they will experience higher frequencies of TVS.

Hypothesis 3.3. If schools have greater limitations, arising from Lack of Resources, on their efforts to reduce or prevent crime, then they will experience higher frequencies of TVS.

Hypothesis 3.4. If schools have greater limitations, arising from external policies on disciplining students, on their efforts to reduce or prevent crime, then they will experience higher frequencies of TVS.

Hypothesis Four. If a linear combination of school level person-related and environment-related factor measures are entered into an equation, then frequencies of a behavior-related factor of TVS will be predicted.

Hypothesis Five. If three contextual variables of school Level of Instruction, Size, and Urbanicity are included in the model, then frequencies of a behavior-related factor of TVS will be predicted.

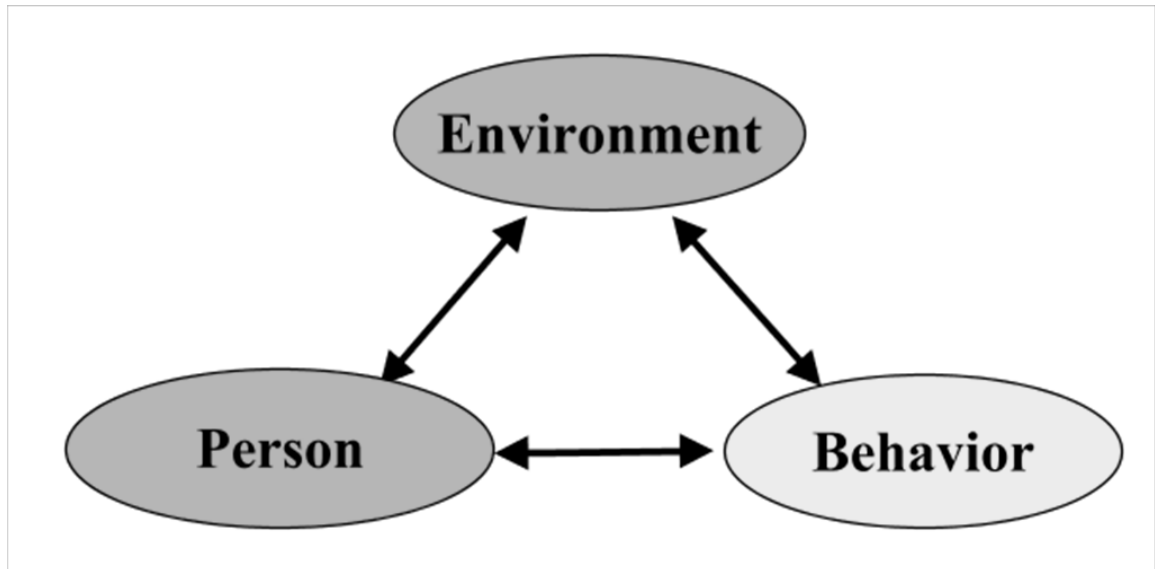


Figure 1. Social Cognitive Theory of Triadic Reciprocal Determinism (Adapted from Bandura, 1986).

Chapter Two: Related Literature

The purpose of this chapter is to present professional literature related to an analysis of factors associated with a problem of teacher victimization by students (TVS). First, the theoretical basis of the current study will be presented. After that, a behavior-related factor of TVS will be examined. Then, environment-related factors will be explored. Later, a person-related factor of student academic orientation will be discussed. Finally, three contextual factors germane to the problem of TVS will be detailed. The main sources of information related to this investigation are empirical research studies, government-sponsored research reports, and other relevant sources.

Theoretical Basis of the Current Study

When doing research, it is imperative to have an appropriate theoretical framework within which to work. Thus, when conceptualizing a study it is important to know the assumptions and limitations of the theory upon which the study is based. This is because the theoretical foundation of the study can affect the methodological approach implemented in the conduct of the study. Theories of behavior include, but are not limited to, those with roots in biology, psychology, and sociology. For instance, approximately a century ago, Baldwin (1911) wrote on the topics of theory and of human behavior, and on the intersection of the disciplines of psychology and sociology:

“It is, to my mind, the most remarkable outcome of modern social theory -- the recognition of the fact that the individual’s normal growth lands him in essential solidarity with his fellows, while on the other hand the exercise of his social duties and privileges advances his highest and purest individuality. The

movements are one, although the sciences, from their necessary difference in point of view, must treat them as if they were two” (p. 16).

Two prominent theories of behavior that take the environment, as well as social relationships, into account are Bronfenbrenner’s (1977) Ecological Theory and Coleman’s (1988) Social Capital Theory, respectively. The latter was the theoretical basis of Bauer’s (2008) study of crime and other misbehavior in public schools. A third theory of behavior that takes into account both the individual, and the environment in which the behavior is performed, is Social Cognitive Theory. This view of behavior, as presented by Albert Bandura (1986), is the theoretical foundation of the current study. Since “social cognitive theory applies to learning in general, not just the learning for those of advanced academic potential” (Burney, 2008, p. 130), it presents a theoretical framework for the current study.

The following section provides a brief history of the evolution of Bandura’s development of Social Cognitive Theory. This history spans from the 1950s through the 1980s. First to be examined will be aggression studies from the late 1950s and early 1960s. After that, Social Learning Theory from the 1970s will be explored. Finally, Social Cognitive Theory from the 1980s will be discussed. This history will provide the needed context for understanding the information that will follow, later in this chapter, regarding TVS.

Aggression Studies

Two seminal studies of Social Cognitive Theory were conducted in the earlier part of Bandura’s career during the late 1950s and early 1960s. Student participants of

the first study included adolescent boys. The second study to be mentioned, an experiment, involved boys and girls in nursery school.

Aggression in adolescent boys in the context of guidance provided by their parents. Bandura and Walters (1959) conducted a study that researched aggression in adolescent boys, and the discipline practices these boys' parents employed in raising their sons. Participants included 52 adolescent boys, half of whom were considered aggressive, and their parents. Girls were not included in their study; nor were minority families. Each family had one female parent and one male parent. Aggressive boys were recruited through assistance from probation officers and guidance counselors. Nonaggressive control boys were recruited through assistance from guidance counselors. Boys were matched on age ranges and fathers' occupations. Other demographic socioeconomic variables were held constant.

Among the many instruments employed by the researchers were an adolescent interview schedule and a parent interview schedule. Three interviews per family were conducted; one for each parent and one for each son. Aggressive boys and control boys interacted very differently with their teachers. For example, aggressive boys reported having engaged in behaviors such as (a) swearing at their teacher, (b) talking back to their teacher, (c) throwing school furniture, (d) hitting their teacher (as well as having been hit by their teacher), and (e) striking their teacher with an object. Additionally, interviews indicated that aggressive boys relied on their parents, usually their mothers, to correct school problems such as having received bad grades or having engaged in misbehavior that resulted in suspension from school. These findings revealed inappropriate behavior (i.e., verbal aggression against their sons' educators) which was modeled by parents.

Parents, by being overly permissive in the supervision of their sons, enabled bad behaviors from them. It reasonably could be inferred that this combination of simultaneous belligerence and overly permissive parenting could have influenced their sons' thinking about their own conduct. Not surprisingly, then, these aggressive adolescents, based on interviews, felt less guilt (and occasionally no guilt) about victimizing their teachers, as contrasted with the control group adolescents. Control group boys reported at least some sense of their own wrongdoing when they had mistreated their teachers. Additionally, they tried to find ways to remedy any wrongs they had committed against their teachers.

Since the boys who were classified as aggressive directed more hostile behavior toward their teachers than their non-aggressive counterparts, the current study of TVS may be examined through the lens of Bandura and Walters' (1959) early work in two ways. First, verbal abuse and disrespect of teachers, as well as disorder in their classrooms, may be reasonably categorized as aggressive behaviors. Second, parents and teachers both serve as role models and as authority figures for adolescents. When parents model inappropriate behavior for their children this can lead to problems with their behavior. Bandura, Ross, and Ross (1961) found that children often engage in imitative behaviors which have been modeled by adults. These same parents who modeled inappropriate behavior (e.g., aggression toward teachers) varied in their degrees of permissiveness and punishment of their children's misbehavior.

One effect of this combination of modeled behavior and permissiveness/punishment, provided by the parents, is that it clearly has the potential to influence children's thinking about their own conduct as well as their actual conduct itself. There

is another effect of parents' behavior on their children. Just as parents can influence their children regarding their conduct, they can also influence their children with respect to academic behaviors. Parents can affect their children's ambitions, goals, and motivations (i.e., their psychological orientation) toward academic achievement (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). This is important to the current study since Student Academic Orientation is one of the constructs to be examined in this investigation.

The aforementioned discussion of Bandura and Walters' (1959) work is important to the current study because these researchers' work (a) included either direct or indirect measures of student behavior (i.e., aggressive misconduct); (b) revealed implications regarding parental influences upon student academic orientation; and (c) demonstrated the value and importance of strong parent support for school personnel and procedures.

Verbal and physical aggression modeled by adults (Bobo doll studies). In this experiment, children much younger than the adolescents mentioned above were participants. Specifically, kindergartners were taught to be aggressive, as well as not to be aggressive. This was achieved by having aggressive behavior and non-aggressive behavior modeled for the children by adults. Children first were assigned to one of three conditions: (a) aggressive behavior modeled by an adult, (b) nonaggressive behavior modeled by an adult, and (c) a control group which did not experience behavior modeled by an adult. Aggressive behavior modeled by the adult included, among other actions, punching, beating with a mallet, verbally assaulting, and sitting on a Bobo doll (an inflated plastic doll-like toy that returns to its upright position if knocked over). Nonaggressive behavior modeled by the adult consisted of peacefully playing with

Tinker Toys while exhibiting complete disregard for the Bobo doll. Children were then put into a frustrating situation intended to elicit aggressive behavior responses.¹ The outcome was that children who had seen adults model aggressive behavior generally displayed more aggressive behavior, compared to children who had observed nonaggressive behavior modeled by an adult. The aggressive model group also exhibited more aggression than the control group. Bandura, Ross, and Ross (1961) reported:

“To the extent that observation of adult models displaying aggression communicates permissiveness for aggressive behavior, such exposure may serve to weaken inhibitory responses and thereby to increase the probability of aggressive reactions to subsequent frustrations. The fact, however, that subjects expressed their aggression in ways that clearly resembled the novel patterns exhibited by the models provides striking evidence for the occurrence of learning by imitation.” (p. 580)

Bandura, Ross, and Ross’ (1961) study differed from the Bandura and Walters’ (1959) study because these students were much younger than the adolescents in Bandura and Walters’ study and the sample included girls. Also, this study was more experimental in nature as contrasted with the Bandura and Walters’ study. In that ex post facto study design, the researchers did not actually manipulate variables such as boys’ aggressiveness, but rather recruited eligible participants as intact groups. Their research

¹ Early work on the topic of frustration and aggression came from such scholars as Dollard and colleagues (e.g., Dollard, Miller, Doob, Mowrer, & Sears, 1939). The purported frustration-aggression relationship was defined as not getting what was expected or wanted, and consequently getting upset (i.e., frustrated) and behaving aggressively.

is important to the current study because of the evidence of imitation of adults such as parents and school personnel as mediators of student behaviors.

In summary, research evidence strongly suggests that adults such as parents and educators can, through the process of modeling behavior, influence the conduct and academic orientation of children and adolescents. Consequently, there can be beneficial effects for students, resulting from parents and teachers modeling good behavior and encouraging students to do well. Alternatively, there can be deleterious effects upon these same children due to adults modeling bad or inappropriate behavior and being overly permissive in their approach to leading young people. The next section is about Social Learning Theory which is the second part of this chapter's discussion of Bandura's evolution of Social Cognitive Theory.

Social Learning Theory

In the Bobo doll studies, the relationship among behavior modeled by an adult, observation of that modeled behavior by a young person, and the consequent imitation of this same modeled behavior, by the young person, was demonstrated. Early in the last century, evidence of professionals taking notice of the phenomenon of social learning by children is apparent in this observation from Baldwin, who in 1911 wrote, "Persons do the most unexpected, the most inconsistent things. And it is these things that attract attention and call out the impulse to imitate. The child imitates the acts of persons" (Baldwin, p. 23). Imitation is related to learning. Once an imitated behavior has been performed by the observer with the model no longer present, learning has occurred. Learning through observation of others is the foundation of social learning.

So far in this chapter, much has been written about persons modeling behavior and persons observing behavior. Two important elements of Social Learning Theory (i.e., person and behavior) have been discussed. The environment is the third important element of Social Learning Theory. This will be further developed in the next section which presents the theory of Triadic Reciprocal Determinism, a concept which is particularly important to Social Learning Theory.

Triadic Reciprocal Determinism. Triadic Reciprocal Determinism, in Social Learning Theory, involves interactions among three variables of Behavior, Person, and Environment (see Figure 1). Bandura (1977) presented Triadic Reciprocal Determinism as part of Social Learning Theory acknowledging that (a) the person influences the behavior, (b) the behavior influences the person, and (c) that the environment influences, and is influenced by, both the behavior and the person. In this theory behavior can affect the person. For example, if a student engages in an act of disrespect toward a teacher, he or she may subsequently feel a sense of guilt. Alternatively, another student may feel a very different emotion such as a sense of power. Thus, in this very simple example, the same behavior (in this case, an act of disrespect toward a teacher) has affected two different persons in two different ways.

Triadic Reciprocal Determinism also acknowledges that behavior engaged in by the person does not occur in isolation. The theory takes into account the environment in which the behavior occurs. Egan, Monson, and Perry (1998) noted that, “aggression-related cognitions are not fixed entities but, rather, are dynamic knowledge representations that can change in response to situations and experiences” (p. 1004). So if, for instance, the disrespectful acts of the hypothetical students described above were in

response to some injustice perpetrated by the teacher, as perceived by the students, then this very possibly might influence the students to behave in a different way toward that teacher. Bandura (1977) wrote:

“Social learning theory treats moral judgments as social decisions made on the basis of many factors that serve to mitigate or to justify the wrongness of conduct. Among the multidimensional evaluative criteria are included the characteristics of the wrongdoer, the nature of the act, its long-range as well as immediate consequences, the setting in which it occurs, the motivating conditions, the remorse of the transgressor, the number and type of people who are victimized, and a host of other extenuating circumstances” (p. 46).

Bandura’s Triadic Reciprocal Determinism theoretical framework among variables of Behavior, Person, and Environment may be applied to the current study (see Figure 3). The behavior under investigation is Teacher Victimization by Students (i.e., TVS). The person is the student, including his or her attitudes, perceptions, and feelings toward academic achievement (i.e., Student Academic Orientation). The environment consists of schools whose efforts to reduce or prevent crime in their buildings are limited by various sources of problems. Each of these factors will be further elucidated later in this chapter. Next to be discussed, however, is the important topic of self-efficacy as it relates to Social Learning Theory and student attitudes.

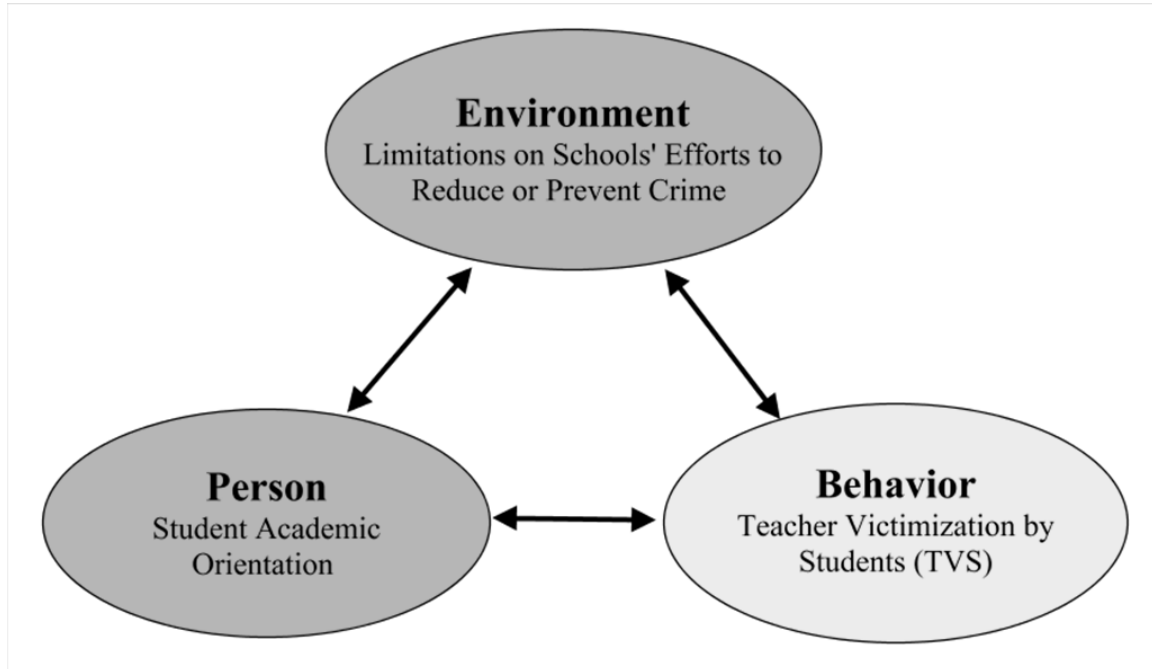


Figure 2. Reciprocal relationships among factors of Behavior, Person, and Environment in the current study.

Self-Efficacy. This is an important topic because self-efficacy is an integral part of Social Learning Theory and its successor, Social Cognitive Theory. If a student thinks that he or she can do well at certain academic tasks, then that student could be characterized as having high self-efficacy for academic achievement. Prior research (Bandura, 1997) suggested that there is a relationship among student attitudes, self-efficacy, and achievement. Bandura wrote,

“The extent to which such factors as ... attitudes toward academic activities influence academic performance is partly dependent on how much they affect efficacy beliefs. The more they alter efficacy beliefs, the greater the impact they have on academic attainments” (p. 216).

Thus, because of the interrelated nature of the relationships among student attitudes, self-efficacy, and achievement, Bandura's (1997) research on self-efficacy is relevant to the current study.

Previous research (Breslau, Breslau, Miller, & Raykov, 2011) revealed an association between student behavior problems and student achievement over time. Specifically, greater student misbehavior at age six, as well as at age eleven, was associated with lower student scores on Reading and Mathematics achievement tests at age seventeen. Additionally, other researchers (Rutchick, Smyth, Lopoo, & Dusek, 2009) found that parents' perceptions of their children's behavior affected the parents' expectations of their children's academic achievement. Specifically, parents who perceived their children as having more frequent behavior problems had lower expectations for their children's academic achievement, as did the children themselves. The lower expectations were related to lower academic achievement when measured five years later. Taking into consideration the foregoing research, a potential relationship between Student Academic Orientation, a person-related construct, and TVS, a behavior-related construct, is examined in the current study.

Summary of Bandura's Social Learning Theory. Based upon the work of Bandura (1977), modeling of behavior is a salient characteristic of Social Learning Theory. In this theory, it is recognized that a person can learn by observation of a model engaging in a specific behavior. That person does not necessarily have to experience consequences directly in order to affect his or her future behavior. Also, in Social Learning Theory, the role of self-efficacy is very important, because if one is self-efficacious at a given task, then one is more likely to engage in behaviors that will result

in successful attainment of the desired goal. Additionally, the concept of Triadic Reciprocal Determinism plays a vital role in Social Learning Theory. Simply stated, reciprocal interactions among factors of behavior, person, and environment all influence, and are determinants of, each other. Recent topics of study that have employed Social Learning Theory range from delinquency (e.g., Stevens, May, Rice, & Jarjoura, 2011) to intimate partner violence (e.g., Anderson & Kras, 2007). The final portion of this section on theoretical underpinnings of the current study is about Social Cognitive Theory which is explained in the next part of this chapter.

Social Cognitive Theory

By the middle of the 1980s, Albert Bandura authored a very influential monograph on Social Cognitive Theory entitled *Social Foundations of Thought and Action* (Bandura, 1986). Social Cognitive Theory evolved out of Social Learning Theory. As explained by Pajares (2002), Social Cognitive Theory is more encompassing than Social Learning Theory:

“Bandura altered the label of his theory from social learning to social “cognitive” both to distance it from prevalent social learning theories of the day and to emphasize that cognition plays a critical role in people’s capability to construct reality, self-regulate, encode information, and perform behaviors.” (Para. 2).

Social Cognitive Theory applied in recent research. Social Cognitive Theory has been employed around the world within such important areas of research as human health (Bandura, 2004), college student health (Zhang, 2012), child and adolescent nutrition studies (Roche, Conner, Kolodinsky, Buckwalter, Berlin, & Powers, 2012) and teacher work satisfaction (Duffy & Lent, 2009).

Duffy and Lent (2009) surveyed independent school teachers in North Carolina regarding work satisfaction. The sample consisted of 366 teachers of whom approximately 80% were females; most were white. Roughly 75% were elementary or middle school teachers and approximately 25% were high school teachers. The researchers found: (a) positive affect, self-efficacy, and work conditions were each significantly positively related to work satisfaction; (b) positive affect was significantly positively related to self-efficacy; (c) teacher goal support was significantly positively related to work conditions; and (d) positive affect was significantly positively related to goal support; goal support was significantly positively related to work conditions. Additionally, Duffy and Lent found that work conditions mediated the relationship between self-efficacy and work satisfaction and also between goal support and work satisfaction. The current study (which examines factors of Behavior, Person, and Environment) extends Duffy and Lent's research. Duffy and Lent's variables of work satisfaction, self-efficacy, and (positive) affect variables could be person-related variables in the current study. Additionally, Duffy and Lent's variables of work conditions and support for teacher goals could be classified as environment-related variables in the current study; Lack of Support is one of the constructs investigated in the current study.

Having discussed the topic of Social Cognitive Theory and its predecessors above, next to be explored is research on the mistreatment of teachers perpetrated by parents, teachers, administrators, and, especially, students. Adapting the paradigm of Bandura's (1977; 1986) Triadic Reciprocal Determinism of behavior, person, and environment (under Social Cognitive Theory and its antecedents) to the current study,

these acts of wrongdoing would fall into the broad category of behavior-related factors or TVS.

Behavior-Related Factor: A Problem of Teacher Victimization by Students

There has been little research regarding teacher victimization committed by students (Galand, Lecocq, & Philippot, 2007). This area of neglected investigation is a problem because “information on the rate and scope of teacher victimization is critical for increasing awareness, developing effective supports and interventions, and promoting positive school/classroom climate, student learning, and recruitment and retention of highly qualified teachers into the education profession” (Espelage et al., 2013, p. 75). This section examines the dilemma of TVS which would fall under the behavior portion of Bandura’s (1977; 1986) Triadic Reciprocal Determinism of behavior, person, and environment.

Physical TVS. An extreme form of teacher victimization by students involves threats and perpetration of physical assaults. A pilot study of records of urban teacher assaults, which were reported to authorities for medical attention, was conducted by Levin, Martinez, Walcott-McQuigg, Chen, Amman, and Guenette (2006). “The school system, defined assault broadly to include verbal acts, threats, and physical acts; this definition was used in the study” (p. 212). Regarding the kind of victimization committed against these teachers, there were overwhelmingly many more physical assaults than verbal assaults. Bruises and sprains were the most common types of physical problems for teachers. Their hands, arms, heads, and necks were most often injured. The majority of the assaults took place inside the building, while class was in

session. Other frequent times when assaults occurred were during change of classes. Most of the assaults were committed by students and usually no weapons were used.

Another type of teacher victimization, nonphysical TVS, is examined in the current study. This problem is discussed next.

Nonphysical TVS. Behaviors such as verbal abuse, disrespect, and widespread disorder in classrooms have been reported in various countries. In the U.S., Gerberich et al.'s (2011) conceptualization of nonphysical violence (NPV) against educators included, among other behaviors, threats and verbal abuse:

“Threat was defined as when someone used words, gestures, or actions with the intent of intimidating, frightening, or harming them (physically or otherwise)...*Verbal abuse* occurred when another person yelled or swore at the educator, called the educator names, or used other words intended to control or hurt” (p. 294, italics in the original).

Thus, Gerberich et al.'s NPV variable falls under the TVS umbrella in the current study.

Over 4,700 Minnesota educators were surveyed in Gerberich et al.'s (2011) investigation. Approximately 20% had been threatened, and about 33% had been verbally abused. Three salient findings can be gleaned from their research. First, regarding person-related variables, approximately 75% of those who committed NPV against the educators were students, and over 33% of these students were perceived by the educator as being impaired by a disability. Second, concerning environment, educators who worked in alternative placements (i.e., separate learning environments for students with disruptive behaviors) were four times as likely as those who worked in regular public schools to experience NPV. Third, of the many undesirable emotions

experienced by the educators, the greatest percentages of NPV victims felt frustration, anger, fear, and sadness; all of which may interfere with effective instruction (Day & Qing, 2009).

Also in the U.S., Gottfredson, Gottfredson, Payne, and Gottfredson (2005) examined teacher victimization, one of their several dependent variables, which occurred across 254 secondary public schools. Of the many predictors in their model, two latent construct factors were significant positive predictors of teacher victimization: (a) concentrated poverty and (b) school size and urbanicity. One latent construct factor and one measured variable were significant negative predictors of teacher victimization: (a) psycho-social climate and (b) grade level, respectively. Approximately 23% of the variance in teacher victimization was accounted for by their full model. Their study is relevant to the current one which examines a behavior-related factor of TVS. As with Gottfredson et al.'s study, the current one also examines urbanicity and school size. In addition to Gottfredson et al.'s inclusion of middle and high schools in their study, the current one extends the research by examining elementary and combined schools as well. Unlike that of Gottfredson et al.'s, the current study does not investigate concentrated poverty per se; it does address an environment-related construct, Lack of Resources, however. Nor does the current study examine psycho-social climate. However, it does address two other environment-related constructs, Lack of Support and Fear, which may be potentially associated with TVS.

Also in the U.S., Bauer (2008) analyzed data from the 2006 edition of the SSOCS (National Center for Education Statistics, 2006). Bauer's sample consisted of over 2,500 schools which were nationally representative of those across the United States. The

theoretical basis of her study was Social Capital Theory (Coleman, 1988). Of her many dependent variables, one index especially relevant to the current study was called DISCIPLINARY PROBLEMS. It was composed of four SSOCS items: (a) student verbal abuse of teachers, (b) student acts of disrespect for teachers, (c) widespread disorder in classrooms, and (d) student-to-student sexual harassment. Regarding Bauer's structural independent variables, three items were particularly relevant to the current study. First, concerning school level of instruction, Bauer found that middle schools, as compared to elementary schools, significantly positively associated with DISCIPLINARY PROBLEMS, but that high schools and combined level schools did not. Second, regarding school size, larger student enrollment sizes significantly negatively associated with DISCIPLINARY PROBLEMS. That is, as student enrollment increased DISCIPLINARY PROBLEMS decreased. This finding was unexpected by Bauer. Third, regarding locale or urbanicity of the school, neither city schools, nor small town schools, nor rural schools, as compared to suburban ones, significantly associated with DISCIPLINARY PROBLEMS. Two independent variable measures of Social Capital were relevant to the current study. One of them, called indicators of absence of guardianship, was derived from several SSOCS items: (a) lack of or inadequate teacher training in classroom management, (b) likelihood of complaints from parents, (c) lack of teacher support for school policies, (d) lack of parental support for school policies, (e) teachers' fear of student retaliation, and (f) inconsistent application of school policies by faculty or staff. The other Social Capital independent variable, called *Student Commitment to School*, was composed of two items: (a) the *percentage of students who consider academic achievement to be very important* and (b) the *percentage of students*

who are likely to go to college after high school. Neither indicators of absence of guardianship nor *Student Commitment to School*, the two independent variable measures of Social Capital that were relevant to the current study, significantly associated with the outcome DISCIPLINARY PROBLEMS.

Bauer's (2008) research is extended by the current study in several ways. First, both investigations analyze data derived from the government-sponsored survey instrument, SSOCS. Bauer used the 2006 edition; the current study uses the 2008 edition (National Center for Education Statistics, 2008). Second, except for the student-to-student sexual harassment item, Bauer's three remaining variables in her DISCIPLINARY PROBLEMS index (specifically, student verbal abuse of teachers, student acts of disrespect for teachers, and widespread disorder in classrooms) were clearly related to teachers being victimized by students. In the current study, TVS is a behavior-related construct which is similar to, but not the same as, Bauer's DISCIPLINARY PROBLEMS variable. Third, both studies examine environment-related factors, several of which are found in Bauer's independent variable index, indicators of absence of guardianship. Fourth, both investigators include contextual variables of school level of instruction, school size, and school urbanicity. Finally, Bauer's independent variable, *Student Commitment to School*, is examined in the current study as a person-related factor called Student Academic Orientation. This new name, in this researcher's opinion, more accurately labels this particular construct with respect to the theoretical perspective taken by the current study.

Very briefly, concerning research beyond the U.S., studies in England and Canada also have been conducted. In England, 101 high school teachers distributed across seven

urban schools were surveyed regarding frequency of their experience of being victimized by students (Terry, 1998). It was found that approximately 33% of respondents reported a problem of verbal abuse. In western Canada, a survey of 771 teachers from British Columbia investigated teacher victimization (Wilson, Douglas, & Lyon 2011). One of their constructs, covert violence, included behaviors such as verbal insults against teachers, obscene gestures directed at them, and comments made to harm their reputations. The researchers found that increased frequency of covert violence negatively impacted teachers' morale and job satisfaction, as well as increased their reports of physical problems, and of emotional problems. The many detrimental effects of TVS is the next topic to be discussed.

Detrimental effects of TVS. There are many detrimental effects related to the problematic behavior of TVS. It is harmful to teachers. TVS causes them stress and contributes to the phenomenon of teacher burnout. According to Chang (2009), "Burnout happens when exhaustion replaces feeling energized, cynicism replaces being hopeful and being involved, and ineffectiveness replaces feeling efficacious" (p. 195). Kokkinos, Panayiotou, and Davazoglou (2005) studied burnout in 465 teachers in Thrace, Greece. The researchers detected an inverse relationship between these primary school teachers' levels of stress and their acceptance of defiant and antisocial student conduct. Since TVS "may contribute to the levels of stress experienced by teachers" (Terry, 1998, p. 267), it is not surprising that teachers who had experienced burnout were less willing or able to accept disobedient and disruptive student transgressions (Kokkinos, Panayiotou, & Davazoglou).

TVS negatively impacts school climates and can make students, faculty, and staff feel insecure creating an atmosphere of loss of control that pervades the school. Students feel uncomfortable when a sense of security is replaced by fear because the adults are not in control. This leads to a feeling that school is not a safe place. Often, however, there are differences between the perceptions of students and teachers regarding school climate and safety (Bosworth, Ford, & Hernandez, 2011). In a survey study employing 182 students and 32 teachers in a rural public high school, Booren, Handy, and Power (2011) related that “students reported feeling less connected and less safe than teachers within their school” (p. 12). As the problem of TVS is investigated, it is important to keep the differences in perceptions of the level of crime and safety, between students and adults within the school building, in mind.

Regarding the benefits of good classroom behavior for teachers and their pupils, Gaskins, Herres, and Kobak (2012) wrote, “From the standpoint of the teacher, reduced effort in managing disruptive behavior increases time available for attending to student learning and reduces emotional stress” (p. 228). In the preceding sections, evidence of a problem of the behavior-related factor, TVS, was established. Detrimental effects of TVS were presented. The next topic includes environment-related factors potentially associated with TVS.

Environment-Related Factors

Limitations upon schools’ efforts to reduce or prevent crime. According to Chaney, Chowdhury, Chu, Lee, and Wobus (2003),

“There is evidence that schools’ ability to control crime is associated with their control of lesser violations. That is, lesser violations are an indication of the state

of discipline in the school, so that when these violations are controlled, students do not progress to more serious disciplinary problems” (p.63).

These factors related to limitations upon schools’ efforts to reduce or prevent crime include Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students. These factors, accordingly, would fall under the environment portion of Bandura’s (1977; 1986) Triadic Reciprocal Determinism of behavior, person, and environment in Social Cognitive Theory. The first factor to be discussed is Lack of Support.

Environment-related factor: Lack of Support. In education, the important role of support has been a prominent topic for many years. Teachers need support. So do school principals (Wong, Cheuk, & Rosen, 2000). Two types of environment-related Lack of Support will be explored: Lack of Support from Parents and Lack of Support from Teachers.

Lack of support from parents. One major type of support is that which comes from parents for their children. This includes obvious necessities such as the adequate provision of food, clothing, shelter, medical care, and education. When parents fail to appropriately nurture their children, problems are almost guaranteed to arise. The study by Bandura and Walters (1959) demonstrated the salient role of parenting practices with regard to male adolescent aggression, including that directed toward teachers and other adults. Another type of parental support is for school personnel. Again, Bandura and Walters’ research is relevant. Some parents made excuses to school personnel for their sons’ misbehavior. Additionally, the parents modeled inappropriate aggressive behavior toward the educators. By conducting themselves in this manner, parents essentially

sanctioned their sons' own engagement in hostile behavior toward teachers and other adults working in schools. "Bullying behaviors of parents may be seen in a number of forms, including physical and verbal abuse. Threats can be made through gestures. Crossing and intruding upon boundaries and personal space can be viewed as a means of intimidation" (Johnson, 2008, p. 24).

Research about Lack of Support from parents includes studies such as Su, Mrug, and Windle's (2010) investigation. Their sample included 603 students. Slightly more than half were male with a mean age of thirteen years. Over 75% were African American, about 20% were white, and the remainder were of other racial backgrounds. The setting was Birmingham, Alabama. Family income varied greatly; the median was approximately \$27,500. Two environment-related independent variables in their study were adolescent exposure to violence and parental nurturance of adolescents. Two behavior-related dependent variables were adolescent proactive and reactive aggression. The authors differentiated between these two types of aggression in the following definition. "Proactive aggression can be characterized as goal-oriented, self-initiated, nonimpulsive aggressive behavior, whereas reactive aggression is impulsive and is typically triggered by a perceived threat or provocation" (p. 815). Proactive aggression, as defined by these authors, is reminiscent of Bandura's (1986) aforementioned Social Cognitive Theory, which proffers such cognitive capabilities as forethought, self-regulation, and self-reflection. Additionally, the researchers studied three (person-related) mediator variables that measured adolescent "Aggressive Fantasies", "Violence-Approving Attitudes", and "Social Emotional Empathy" (p. 816). Extraneous (person-

related) variables, for which the researchers controlled, “included gender, age in years, ethnicity, and family income.” (p. 817).

Data were statistically analyzed through path analysis. Su, Mrug, and Windle (2010) reported that “higher levels of violence exposure were associated with more aggressive fantasies and more approving attitudes toward violence” (p. 819). Under Social Cognitive Theory, it was interpreted that students who lived in a high violence environment would see violence modeled regularly (i.e., the violence exposure variable). Students would hold attitudes which were more accepting of violence (a person-related variable) and would have aggressive fantasies (another person-related variable). The authors also reported that “lower parental nurturance was associated with more violence approving attitudes and lower social emotional empathy” (p. 819). If children are not appropriately nurtured by their parents, then they will neither observe nor experience modeling of human beings caring for one another. Finally, the researchers found that “all three mediators were in turn related to both types of aggression” (p. 819). The current study extends Su, Mrug, and Windle’s (2010) research by examining the problematic behavior of TVS, aggressive behavior against teachers perpetrated by students, and parental support.

May, Johnson, Chen, Wallace, and Ricketts (2010) have pointed out the lack of professional literature on the topic of aggression committed by parents toward teachers. Using a survey of their own construction, May et al. studied a sample of over 5,000 public elementary and secondary teachers in Kentucky. The researchers regressed the outcome variable, number of problematic parent behaviors, on several predictor variables. Relevant to the current study, however, were two contextual elements of

school enrollment size and level of instruction. The three most frequent hostile parent behaviors directed toward teachers were shouting, profanity, and verbal threats; this, with regard to the three most frequent topics of contention which included discipline, grades, and special education issues. The researchers found that approximately sixteen percent of the variance in the outcome variable was accounted for by all of the predictor variables. Particularly relevant to the current study, and specifically regarding level of instruction, it was found that elementary teachers were victimized significantly fewer times than secondary teachers. This finding supports the viewpoint that there is more parental support at the elementary school level of instruction as compared to the secondary level. By contrast, another variable relevant to the current study, school size, was not significant. Thus, this finding does not support the notion of larger schools as problematic regarding lack of support from parents. Finally, May et al.'s research is extended by the current study which takes into account not only level of instruction and school size, but also school urbanicity.

Results from government-sponsored surveys clearly identified lack of support from some parents as a major challenge for educators. Almost 50% of U.S. public schools in the SSOCS 2008 agreed with the survey item that "Lack of parent support for school policies" was a problem regarding limitations upon schools' efforts to reduce or prevent crime (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). A little more than 33% of schools agreed with the survey item that "Likelihood of complaints from parents" was a problem (Tonsager, Neiman, Hryczaniuk, & Guan).

Results from the 2008 edition of the Public School Teacher Questionnaire (PSTQ) yielded similar findings. Sixty-four percent of teachers agreed with the survey item, "I

receive a great deal of support from parents for the work I do.” (U.S. Department of Education, National Center for Education Statistics **a**, n.d.). Affirmative respondents were mostly elementary teachers from small rural communities. This is consistent with the perception of a bigger problem of lack of support from parents in city schools, and in larger schools.

Lack of support from teachers. A problem of Lack of Support from teachers has been identified in this study. Approximately 25% of schools on the SSOCS 2008 reported a problem concerning lack of support from teachers for school policies (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). On the same survey, a little less than 50% of schools reported a problem regarding inconsistent application of school policies by faculty or staff (Tonsager, Neiman, Hryczaniuk, & Guan).

Less extreme results on the PSTQ 2008 were reported in response to a similar survey item. Eighty-eight percent of traditional public school teachers agreed with the statement, “There is a great deal of cooperative effort among the staff members.” (U.S. Department of Education, National Center for Education Statistics **b**, n.d.). Affirmative respondents were mostly elementary teachers from smaller (i.e., less than 1,000 students) suburban schools. These findings are consistent with the perception of less collegial support among staff within large city schools.

In summary, Lack of Support is a problem in many schools across the U.S. Findings presented above are important to the current study since Lack of Support is an environment-related construct that potentially could be a limitation upon schools’ efforts to reduce or prevent crime. In turn, limitations upon schools’ efforts to reduce or prevent crime are relevant to the current study as they might be associated with TVS.

Environment-related factor: Fear. “The experience of victimization at school can promote fear” (Schreck & Miller, 2003, p. 71). Fears that some teachers experience, which are discussed below, include fear of: (a) school violence and physical harm, (b) psychological and professional harm, and (c) litigation.

Teacher fear of school violence and physical harm. There are many potential threats against teachers of which they reasonably could be fearful. The first possibility is physical harm. On SSOCS 2008, slightly over 20% of schools reported problems with teacher fear of retaliation by students (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). If teachers believe they are in a risky environment, they reasonably may be in fear for their personal safety. “Simply the fear of violence, without actually experiencing it, may be enough to precipitate several adverse outcomes” (Wilson, Douglas, & Lyon, 2011, p. 2355).

Ricketts (2007) conducted a survey study of teacher fear of being victimized at school. The setting was urban schools in the southeast U.S. involving 447 school teacher participants. According to Ricketts, “As K-12 teachers’ perceived effectiveness of school-based polices increased, their perceived risk for victimization decreased. In addition, as K-12 teachers’ perceived risk for victimization increased, their fear of student-perpetrated acts of school violence also increased” (p. 57). Thus, the connection between sound school policy and teacher fear of harm was established. Ricketts’ research is extended by the current study because it examines fear and external policies on disciplining students as environment-related factor constructs that potentially could place limitations upon school’s efforts to reduce or prevent crime. These factors could be associated with TVS.

Teacher fear of psychological and professional harm. Teacher fear of psychological harm from students could arise from verbal attacks such as repeated insults and threats, as well as persistently being subjected to non-verbal disrespect (e.g., obscene hand gestures). Additionally, damage can come to teachers' reputations from lies, gossip, or cyber-bullying.

Teacher fear of students harming them professionally could evolve from continual disruption of teachers' classroom instruction, where the teacher appears incompetent and unable to manage the class. Vaaland and Roland (2013) explained,

“The teacher is the formal leader of the classroom....Examples of situations that might undermine the teacher's position could be when a teacher is humiliated, mocked, made to look ridiculous, made to appear powerless, victimized, etc. If the pupils catch signs that such situations can easily be achieved, they may interpret it as an opportunity to attain an alternative power base as a result of the teacher's decreased potential to lead” (pp. 178-179).

Teacher fear of litigation. Almost 20% of schools on the SSOCS 2008 reported a problem concerning fear of district or state reprisal (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). A related issue is teacher fear of students (or their surrogates) suing them. Slightly over 35% of schools on SSOCS 2008 reported a problem concerning fear of litigation (Tonsager, Neiman, Hryczaniuk, & Guan, 2010).

Holben, Zirkel, and Caskie (2009) researched teacher fear of being sued when breaking up student fights in school. The authors concluded that teachers are more worried about being sued for not intervening in student fights as contrasted with fear of being sued for intervening in stopping fights. Holben, Zirkel, and Caskie's research is

extended by the current study because it investigates the broader theme of fear as one of four potential limitations upon schools' efforts to reduce or prevent school crime.

Environment-related factor: Lack of Resources. For many public schools in the U.S., Lack of Resources is a problem. This may include lack of funding, lack of teacher training (especially in classroom management), or a lack of alternative educational placements for students whose behavior is disruptive. Alvarez (2007) reported, "many schools do not have access to, or are not equipped to provide, the types of resources and services shown in the clinical literature to benefit aggressive youth" (p. 1114).

Lack of funding. Although almost two-thirds of schools on the SSOCS 2008 reported a problem with lack of funding (Tonsager, Neiman, Hryczaniuk, & Guan, 2010), Sims (2011) concluded "that court ordered finance reform is at best an inefficient way to increase student achievement" (p. 1043). Nonetheless, schools need adequate funding to operate. At least three germane critical topics can be identified. First, it is essential to retain motivated competent teachers who feel adequately compensated. "Higher teacher salary does appear to positively impact test performance...School finance reforms, which increase expenditures might be more effective if spending increases are targeted toward increasing teacher salaries that are perhaps a crude proxy for teacher quality" (Chaudhary, 2009, p. 98). Second, teachers need appropriate instructional materials to teach optimally (Chingos & Whitehurst, 2012). Lack of funding for instructional materials may hinder instruction which, consequently, may lead to lower student achievement, particularly regarding learning outcomes which are dependent upon up-to-date instructional technology. Third, adequate school facilities are essential. Not only are poorly maintained schools unpleasant environments, they may endanger the health of

students, faculty, and staff. Additionally, “having a fully functioning school – one with better quality roofs, walls or floors, with desks, tables and chairs, and with a school library – appears conducive to student learning” (Glewwe, Hanushek, Humpage, & Ravina, 2011, p. 41).

Lack of teacher training in classroom management. “Teachers who effectively manage their classrooms maximize student engagement and increase the probability of academic success. Thus, classroom-management skills are critical for all teachers and students” (Simonsen, MacSuga-Gage, Briere, Freeman, Myers, Scott, & Sugai, 2013, p. 1). The effects of teacher training upon student achievement vary greatly (Harris & Sass, 2011). However, training in classroom management appears to be exceptionally important because, on the SSOCS 2008, lack of teacher training in classroom management was a problem in over 40% of schools (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). This finding is important to the current study because if student behavior is poorly managed by the classroom instructional leader (i.e., the teacher), who is inadequately prepared in this area, then as can be inferred from Simonsen et al. (2013) above, students are essentially doomed to scholastic failure. It is hard to achieve academically if there is constant disorder in one’s classes.

Lack of alternative placements. Almost 64% of schools, on the SSOCS 2008, reported a problem with lack of alternative placements for students with behavioral issues (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). The need for alternative education resources was affirmed by Aron (2006) who wrote, “Efforts within the K-12 system need to be supplemented with high quality alternative education opportunities...for the large

number of youth who, for a variety of reasons, have not been able to succeed in traditional schools” (p. 23).

Mitchell and Booker (2011) conducted a study of demographic characteristics of students (a person-related variable) who were remanded to alternative education schools under a discretionary process. A finding directly relevant to the current study, regarding level of instruction, was that high school students were more likely to be initially referred than middle school students. (Elementary students were not included in the study.) Additionally, concerning recidivism, high school students also were more likely to be reassigned to these programs, within the same year, than were middle school students. This finding is important to the current study because level of instruction is one of the contextual variables examined in the investigation. Indirectly related to the current study, but still relevant to it, Mitchell and Booker found that Hispanic and African American students were more likely to be initially referred for alternative placements, and later reassigned to these programs, than were White students. Although race is not directly measured in the current study, school urbanicity is. Since race is not evenly distributed across various levels of school urbanicity (e.g., there are higher percentages of Hispanic and African American students than White students in many urban public schools), this information is important to the current study with regard to lack of alternative placements for students.

Environment-related factor: External Policies on Disciplining Students. It is important for educators at the school building level to devise and effectively implement student discipline policies (Way, 2011). As mentioned previously in this chapter, teacher fear of violence was significantly associated with school policies (Ricketts, 2007). Just

as discipline policies are crucial at the building level, so they are at higher levels of administrative authority. According to Morrison and Skiba (2001), “The process of school discipline is highly complex, involving student behavior, teacher reactions, administrative disposition, and even local, state, and national politics” (p. 175). Morrison and Skiba’s viewpoint is consistent with a social cognitive theoretical approach to the issue of student discipline because of the multifaceted reciprocal nature of interrelationships among behavior, person, and environment, mentioned earlier in this paper.

On the SSOCS 2008, three survey items asked about policies which originated outside of the school, at either the district, state, or federal level, regarding disciplining students. Respondents were asked if these discipline policies were limitations on schools’ efforts to reduce or prevent crime in their buildings. Concerning disciplining students with special needs, approximately 60% of U.S. public schools reported some level of limitation arising from federal, state, or district policies. Regarding disciplining students without special needs, almost 36% of schools reported limitations arising from federal policies, and almost 37% of schools reported limitations arising from state or district policies (Tonsager, Neiman, Hryczaniuk, & Guan, 2010). The current study extends the present knowledge base by examining a potential relationship between an environment-related factor of external policies on disciplining students and a behavior-related factor of TVS.

Person-Related Factor: Student Academic Orientation

Employing the framework of Bandura’s (1977; 1986) theory of Triadic Reciprocal Determinism, Student Academic Orientation in the current study is a person-

related construct. It is a similar factor to that which Bauer (2008) called “Student Commitment to School” (p. 58). In her study, this factor was indicated by two items from the SSOCS 2008: (a) principals’ estimated percentages of students who were likely to go to college, and (b) principals’ estimated percentages of students who consider academic achievement to be very important. In the current study, Student Academic Orientation is indicated by these two items plus a third one which measures principals’ estimated percentages of students who scored at a certain level on standardized tests. Generally, a relationship between student academic achievement and problematic student behavior has been demonstrated in the literature (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Gaskins, Herres, & Kobak, 2012; Miles & Stipek, 2006; Stipek & Miles, 2008), although some exceptions can be found (e.g., Algozzine, Wang, and Violette, 2011; Duncan et al., 2007).

One study that supported the assertion of a relationship between student academic achievement and problematic student behavior was that of Gaskins, Herres, and Kobak (2012). They found a significant relationship between student achievement and elementary classroom order (the opposite of classroom disorder). Their sample consisted of 892 fourth- and fifth-grade students. Two outcome variables were growth in reading achievement and in mathematics achievement over one school year. Predictor variables included measures of classroom order. Gaskins, Herres, and Kobak found that in orderly classrooms economically disadvantaged students of minority status attained mathematics achievement growth equal to non-minority students. This finding did not hold for growth in reading achievement. Additionally, 30% and 14% of the variance in achievement in math and reading, respectively, was explained by classroom order. Gaskins, Herres, and

Kobak's study is relevant to the current one because it investigates a potential association between TVS, which is similar to, but more expansive than, their classroom (dis)order variable, and Student Academic Orientation which is similar to their student academic achievement variable.

Another study that supported the claim of a relationship between student academic achievement and problematic student behavior was that of Stipek and Miles (2008). They found significant relationships among variables which measured student aggression, student conflict with teachers, student academic engagement, and student academic achievement. Their sample consisted of 403 elementary students who were followed longitudinally from kindergarten and first-grade through fifth-grade. An important finding relevant to the current study was the path of relationships among the variables measured by Stipek and Miles. Specifically, student aggression predicted student conflict with teachers. This consequently predicted student academic engagement which then predicted student academic achievement. In this same model, a direct path from student aggression to student academic achievement was measured and found to be not significant. The current study has similarities to that of Stipek and Miles. TVS in the current study is similar to their student conflict with teachers variable and with their student aggression variable. Student Academic Orientation is similar to their student engagement and student achievement variables. Stipek and Miles' research is extended by the current study. It examines potential associations with a behavior-related factor (i.e., TVS) of (a) one person-related factor of Student Academic Orientation and (b) four environment-related factors of Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students. Additionally, the current study includes

middle, high, and combined school students, as well as those from elementary, which was the only level of instruction that Stipek and Miles researched in their study.

In summary, when problematic student behavior is directed toward the teacher, there is the potential for TVS. Evidence from the literature generally, but not fully, supported the assertion of a significant positive relationship between student behavior and student academic achievement. In the current study, Student Academic Orientation is a person-related construct, whose potential relationship with TVS, a behavior-related construct, is studied.

Contextual Factors

One way to view behaviors is that they occur not in isolation, but rather within larger contextual circumstances. Three contextual elements potentially associated with the behavior-related problem of TVS will be examined.

Instructional level, school size, and community type. Specifically to be examined in this section are the roles of level of instruction of the school, student enrollment size of the school, and community type in which the school is located (urbanicity).

First, instructional level—elementary, middle, high, and combined schools—will be discussed. Instructionally, the amount of time spent by students with the same teacher each school day decreases as grade level increases. For example, first graders spend much of their day with the same teacher. This contrasts with high school seniors who might receive instruction from a half dozen or more different teachers in a given school day. The difference in the amount of time which students spend with the same teacher could affect the possibility of establishing and sustaining effective instructional

interactions between students and their teachers. This logic in scheduling has been utilized by way of a technique known as looping, where students are taught by the same teacher(s) over the course of two or more years. This practice has been employed with general education students (Franz, Thompson, Fuller, Hare, Miller, & Walker, 2010) as well as those with special needs (Nevin, Cramer, Voigt, & Salazar, 2008). Students who respect and care about their teachers, and who perceive that their teachers respect and care about them, are less likely to have poor high school attendance (De Wit, Karioja, & Rye, 2010) and less likely to engage in teacher victimization-type behaviors (Demanet & Van Houtte, 2012; Freidenfelt Liljeberg, Eklund, Fritz, & af Klinteberg, 2011).

Developmentally, another rationale for studying instructional level is that it is a measure of student age levels. Generally, the youngest students attend elementary schools, older students attend middle schools, and the oldest students attend high schools. This fact is important when analyzing management of age-appropriate student behavior since school security measures differ by level of instruction. High schools tend to use security officers to enforce school policies, as well as dogs to sniff for drugs, more than middle and elementary schools (Jekielek, Brown, Marin, & Lippman, 2007). Middle and elementary schools more often have teachers enforcing school policies related to behavior and contraband.

A second matter related to the context in which TVS occurs is the size of the school vis-à-vis student enrollment. McMillen (2004) contrasted two opposing viewpoints in the ongoing debate over this topic when he wrote,

“Intuitively, school size would appear to have considerable impact on both student achievement and discipline in the school. Smaller size is often associated

with more personal attention, more opportunities for involvement, less anonymity for students, and a more caring environment....Larger schools, however, are said to offer a broader and deeper curriculum along with economies of scale that often appeal to policymakers” (p. 2).

Two important issues which can be affected by school size are student academic achievement and student behavior. Concerning behavior, Gottfredson and DiPietro (2011) analyzed multilevel data from the National Study of Delinquency Prevention in Schools (NSDPS). Two types of student victimization were researched, personal student victimization and property victimization. Personal student victimization was a composite variable which consisted of items that asked if students had been threatened, attacked, or robbed at school during that year. Property victimization referred to students’ having had something stolen from them. Both types of victimization, which were perpetrated by other students, were investigated as outcome variables in Gottfredson and DiPietro’s study. Student enrollment size was one of several predictor variables which were examined. In the final HLM models, school student enrollment size was not significantly associated with personal student victimization, but it was related to student property victimization.

Also concerning behavior, Chen (2008) in an analysis of data from the 2000 edition of the School Survey on Crime and Safety (SSOCS 2000) found a significant positive relationship between student enrollment size of the school and the number of criminal incidents which occurred at school. These crimes included but were not limited to physical attacks (involving weapons and not), sexual battery, robbery, and vandalism. Also Chen found that student misbehavior, a latent variable which was indicated by

student-to-student bullying and classroom disorder, was a mediator between student enrollment size and number of criminal incidents.

Gottfredson and DiPietro's (2011) mixed findings partially corroborated Chen's (2008) study where larger school size was shown to be related to number of crime incidents. However, in Chen's study measures of personal and property victimization were not disaggregated into separate variables. Therefore, it is difficult to draw direct comparisons between the outcomes of the two studies. Nonetheless, these findings are important to the current study for two reasons. First, the behavior-related TVS factor in the current investigation is similar, but not identical, to the student misbehavior construct in Chen's (2008) research. Second, a large portion of the current study has to do with potential associations between the behavior-related factor of TVS and environment-related factors of limitations on schools' efforts to reduce or prevent crime at school. This crime at school aspect of these factors is at least marginally related to Chen's criminal incidents variable.

Before turning to school size associated with academic achievement, one final outcome regarding school size and student behavior is presented. Data from the SSOCS 2008 (Neiman, & DeVoe, 2009) showed that greater percentages of schools with 1,000 or more students, as compared to schools with less than 1,000 students, had more frequent occurrences of TVS. Specifically, these behaviors included: (a) verbal abuse of teachers, (b) disrespect of teachers, and (c) disorder in classrooms. This finding supports the supposition of a lower incidence of TVS in smaller schools.

Regarding school size and student academic achievement, there is some evidence that militates against larger schools. Leithwood and Jantzi (2009) conducted an

expansive literature review on the topic of school size. They examined, among other matters, the relationship between school size and academic achievement of elementary and secondary students. For elementary level instruction, the authors concluded that smaller schools were better for student learning outcomes. However, for secondary students learning outcomes were best in smaller and medium size schools. The authors concluded, “Students who traditionally struggle at school [and] students from disadvantaged social and economic backgrounds...are the major benefactors [*sic*] of smaller schools” (p. 484). Support for medium-sized high schools also was found in the academic achievement-related benefits (specifically, gain scores in reading and mathematics) inuring to students in lower SES circumstances and to those of ethnic minority status (Lee & Smith, 1997). Other researchers have recommended small schools. Based upon their extensive analytical work with large data sets, Howley and Howley (2004) thought that smaller schools were very appropriate for those students who lived in economically impoverished circumstances. This was because of the more equitable outcomes in student learning that the researchers found in such smaller school environments. Flores and Chu (2011) touted the benefits of smaller high schools for certain groups of students in New York City when they wrote, “The positive difference in academic outcomes within small schools compared to large schools is most pronounced among schools with high Latino and high emergent-bilingual populations” (p. 167). Finally, Walsh (2010) reported that parent involvement tends to decrease when students transition from smaller-sized middle schools to relatively larger high schools. This result could possibly negatively affect student achievement.

A third context-related issue regarding TVS is urbanicity of the school. This refers to urban, suburban, small town, and rural locales of schools. Brown-Wright, Tyler, Graves, Thomas, Stevens-Watkins, and Mulder (2011) investigated the problem of student disruptive behavior, their outcome variable, in a study of urban high schools. Predictor variables included (a) home-school dissonance, referring to students experiencing a clash of cultures between those values, demands, and behaviors which were acceptable and even expected at home, as compared to those which were acceptable and expected at school; and (b) student amotivation, a term which referred to students not applying themselves adequately enough to sufficiently achieve academically. Relevant study results included the significant positive relationships found between (a) home-school dissonance and disruptive behavior and (b) amotivation and disruptive behavior. Additionally, the relationship between home-school dissonance and disruptive behavior was significantly mediated by student amotivation. Thus, for urban high school students at least, it can be inferred that the role of a person-related variable such as motivation, or lack thereof, is an important contributor to student behavior beyond the potential role that home school dissonance might play. The work of Brown-Wright, et al. is extended by the current study. TVS, a behavior-related construct in this study, may be viewed as similar to their disruptive classroom behavior variable, while home and school are both environment-related variables. Additionally, their home-school dissonance and amotivation variables are person-related constructs as is the current study's student academic orientation construct.

Another study of TVS context found a relationship between urbanicity, SES, and student academic performance. Stewart (2009) examined performance on a state-

sponsored standardized test of Texas high school students. An important academic finding was made for students from economically disadvantaged families. In schools with these conditions of economic impoverishment as a qualification, higher percentages of students from small rural high schools passed the state exam than similar students in larger suburban and larger urban schools. Based upon these findings and the work of others, Stewart was a proponent of the academic benefits of small rural schools for students of lower socioeconomic status in Texas.

A study by Elrod, Soderstrom, and May (2008) examined the problem of delinquency in rural schools which supports the contextual variables of the current study. Their sample consisted of over 2,000 students across two elementary schools, one middle school, one high school, and one alternative school. Employing a survey of their own design, the researchers included items that asked: (a) about the importance of friends, parents, and teachers caring about them; (b) if students liked their teachers, principal, and other adults in the school; and, (c) about the consequences for breaking school rules, how teachers and the principal treat students after breaking rules, student respect for teachers, and provision of needed assistance with their schoolwork from teachers. Within the framework of the current study, these types of items measure support, or lack thereof, from parents, teachers, administration, and friends. The researchers found that approximately 30% of the variance in each of two outcome variables (delinquency committed at school and delinquency committed away from school) was accounted for by the predictor variables. Results from their study do not lend support to the viewpoint, held by some people, that rural schools provide an escape from the problems of living in big cities.

Delinquency is by definition a violation of rules and laws. Implicit within delinquency is a disregard for authority. At school, teachers are persons in authority. When students verbally abuse teachers, disrespect them, and create disorder in their classrooms, then these students are engaging in behaviors that are antecedents of delinquency. Elrod, Soderstrom, and May's research is important to the current study. Their investigation examined delinquency and student self-reported victimization experiences, both behavior-related constructs, while the current study examines TVS, also a behavior-related construct. Common among these problems is students misbehaving and, depending upon the specific circumstances, victimizing other people.

Finally, there is one other way in which the Elrod, Soderstrom, and May study is important to the current investigation. Two predictors from their study were person-related constructs; specifically, student attachment to school and student feelings of alienation. These are relevant to the person-related construct, student academic orientation, in the current study.

The function of instructional level, student enrollment size, and urbanicity have been discussed above. Knowledge of their role is important in understanding the larger context in which the behavior-related problem of TVS occurs.

Chapter Summary

Chapter Two examined the relevant professional literature regarding the problem of teacher victimization by students (TVS). Theoretical underpinnings of the study were presented, including much detail about Bandura's Social Learning Theory and subsequent Social Cognitive Theory. After that, behavior-related challenges that are important in the current study as potentially being associated with TVS were discussed.

Then, environment-related issues such as Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students, which may serve as potential limitations upon schools' efforts to reduce or prevent crime, were examined. Subsequently, a person-related factor of Student Academic Orientation, also potentially associated with TVS, was explored. Lastly, the three school contextual factors of interest—those pertaining to the problem of TVS—were taken into account. The next section of this study, Chapter Three, discusses the method of the research.

Chapter Three: Methods

The purpose of this chapter is to describe the methodology that will be employed in the conduct of this research study. Information about participants, the survey instrument, the procedure for statistical analysis, and the design of the study will be presented.

Participants

Respondents to the survey are school principals and/or their designees. The population to which this study will generalize is public schools across the United States. Based upon administrations of the survey in prior years, a sample of over 2,500 primary, middle, high, and combined grade level schools will be used. Sampling weights are provided by the National Center for Educational Statistics (NCES). The total number of schools in the national estimate will probably be over 80,000.

Instrument

The School Survey on Crime and Safety (SSOCS), administered in the spring of 2008, will be analyzed in this study. It, along with other editions of the survey, can be found at the following Web address/URL: <http://nces.ed.gov/surveys/ssocs>. With information gleaned from this survey, researchers can “examine what school programs, practices, and policies are used by schools in their efforts to prevent crime” (Ruddy, Neiman, Hryczaniuk, Thomas, & Parmer, 2010, p. 1). The information most relevant to this proposed study includes: (a) survey items that measure five ordered categories of frequencies (i.e., *Happens daily*; *Happens at least once a week*; *Happens at least once a month*; *Happens on occasion*; or *Never happens*) of student behaviors that are disciplinary problems for schools; (b) items that indicate the extent to which certain

problems limit (i.e., *Limits in major way*, *Limits in minor way*, or *Does not limit*) schools' efforts to reduce or prevent crime; (c) survey items that estimate percentages of students who are academically oriented to school (i.e., *Below the 15th percentile on standardized tests*; *Likely to go to college after high school*; and *Consider academic achievement to be very important*); as well as items that indicate school contextual information—level of instruction, size, and locale.

Procedure

The procedure to be explained in this section will present (a) strategies for item selection from the School Survey on Crime and Safety (SSOCS, 2008); (b) data screening; and (c) statistical analysis.

Pre-Analysis. The survey, survey documentation, codebook, and dataset will be procured from the National Center for Education Statistics (NCES). Based upon the research hypotheses, items will be selected as potential variables to be analyzed. Descriptive statistics including counts, percents, means, standard errors of means, standard deviations, maximum and minimum values, skewness, and kurtosis will be performed.

Statistical Analysis Plan: The Measurement Model.

Hypothesis One: If selected survey items are analyzed, then three major construct factors will be identified.

1. Data will be screened for normality, skewness, kurtosis, outliers, missing data, and any other data problems. (Whereas the dataset already will have been cleaned by NCES, no missing data are expected.)

2. Correlations among the potential outcome variables, and among the potential predictor variables, will be conducted and examined.
3. Principal Components Analyses (PCA) will be performed on the potential outcome variables, as well as potential predictor variables, yielding newly created regression factor scores.
4. Descriptive statistical analyses of these regression factor scores will be performed.
5. Skewed factors will be transformed using various methods which could include square root, log 10, and inverse procedures.
6. The person- and environment-related predictor factors will be mean centered.
7. Data tables of descriptive statistics will be created.
8. Operational definitions will be established.
9. A table of correlations among the transformed factors will be produced.

Statistical Analysis Plan: The Structural Model.

Hypothesis Two: If schools have higher percentages of student academic orientation, then they will experience lower frequencies of TVS.

10. In a path diagram, the relationship between the predictor factor student academic orientation and the outcome factor TVS will be analyzed, including estimates and their standard errors.
11. A structural equation model will be developed.
12. The effect size will be analyzed.

Hypothesis Three: If schools have greater limitations on their efforts to reduce or prevent crime within their buildings, then they will experience higher frequencies of TVS.

13. Structural equation models will be developed—in separate path diagrams, the relationships between the predictor factors (a) lack of support for school policies, (b) fear, (c) lack of resources, and (d) external policies on disciplining students and the outcome factor TVS will be analyzed, including estimates and their standard errors.
14. The effect sizes will be estimated.

Hypothesis Four: If a linear combination of school level person-related and environment-related factor measures are entered into an equation, then frequencies of a behavior-related factor of TVS will be predicted.

15. A structural equation model will be developed—in a single path diagram, the relationships between the predictor factors (a) lack of support for school policies, (b) fear, (c) lack of resources, and (d) external policies on disciplining students and the outcome factor TVS will be analyzed, including estimates and their standard errors.
16. The effect size will be estimated.

Hypothesis Five: If three contextual variables of school Level of Instruction, Size, and Urbanicity are included in the model, then frequencies of a behavior-related factor of TVS will be predicted.

17. Employing the general linear model through SPSS complex samples modeling software, the relationships between the three contextual variables, as well as the

five covariate predictors, with the outcome factor TVS will be analyzed, including estimates and their standard errors.

18. An equation will be developed.
19. Simple contrasts will be performed on each of the three contextual factors to test for significant differences between the reference category of each factor and its other categorical levels.
20. The effect size will be estimated.

Design of the Research Study

This will be an ex post facto secondary statistical analysis of data generated from a complex survey design protocol. Potential relationships identified in the first through fourth hypotheses are addressed in Figure 3. This figure shows the possible relationships between the factors and their indicator variables.

There is one latent outcome factor, labeled Teacher Victimization, that will be composed of indicators such as frequencies of verbal abuse of teachers and nonverbal disrespect toward teachers. Victimization corresponds to Bandura's behavior-related variable under Triadic Reciprocal Determinism of Behavior-Person-Environment (in Social Cognitive Theory) discussed in Chapter Two.

There also are latent constructs that serve as predictor factors. Some of these factors are related to the construct Limitations upon Schools' Efforts to Reduce or Prevent Crime, which is one of the headings on the survey. In Figure 3 these factors (along with their potential concomitant indicators) are labeled Factor 1, Factor 2, through Factor N. The factors correspond to Bandura's environment-related variables in Triadic Reciprocal Determinism. There is one person-related predictor factor (which also fits

into Triadic Reciprocal Determinism). This factor, along with its potential concomitant indicators, is labeled Student Academic Orientation.

Three contextual factors related to the fifth hypothesis—grade levels of instruction offered by the school, school size as measured by student enrollment, and locale of the school—are addressed in Figure 4.

Summary

A secondary analysis of data from the School Survey on Crime and Safety (SSOCS, 2008) will be performed to study the problem of teacher victimization. Five major hypotheses will be addressed in this study. The first hypothesis addresses the measurement model and the identification of latent constructs measuring factors of behavior, person, and environment; it states that if selected survey items are analyzed, then three major construct factors will be identified. Preliminary data screening, correlations, factor analyses, and transformations will be performed using SPSS (IBM, 2011).

Structural models will be employed to test the second through fourth hypotheses. The second hypothesis states that if schools have higher percentages of student academic orientation, then they will experience lower frequencies of TVS. Path analysis techniques using LISREL (Jöreskog & Sörbom, 2006) will be applied. The third hypothesis states that if schools have greater limitations on their efforts to reduce or prevent crime within their buildings, then they will experience higher frequencies of TVS. The fourth hypothesis states that if a linear combination of school level person-related and environment-related factor measures are entered into an equation, then frequencies of a behavior-related factor of TVS will be predicted. The fifth and final

hypothesis states that if three contextual variables of school Level of Instruction, Size, and Urbanicity are included in the model, then frequencies of a behavior-related factor of TVS will be predicted. The General Linear Model using SPSS complex samples techniques will be employed. Results will be presented in Chapter Four.

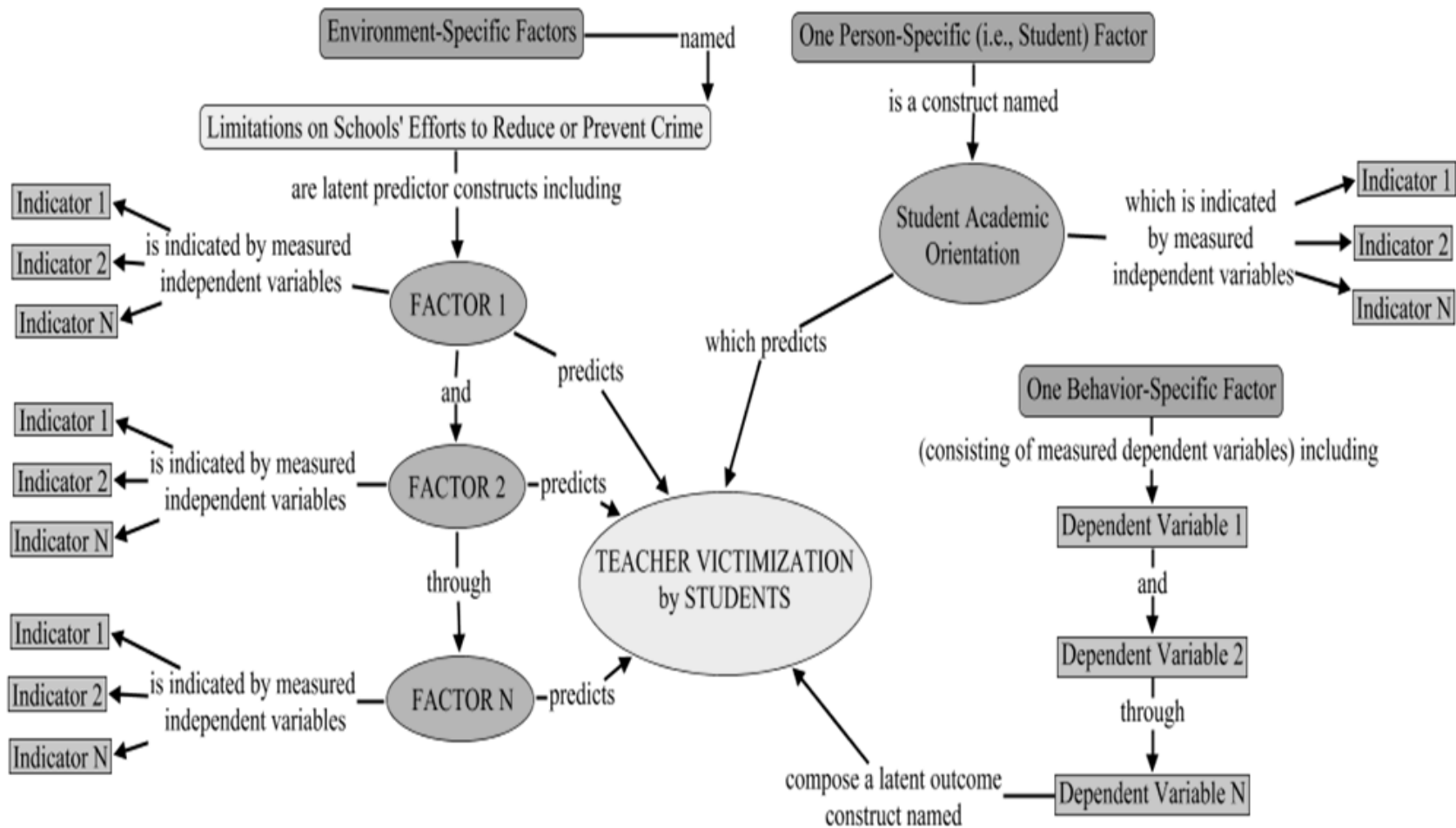


Figure 3. Potential Person-related and Environment-related predictors of a Behavior-related factor of Teacher Victimization.

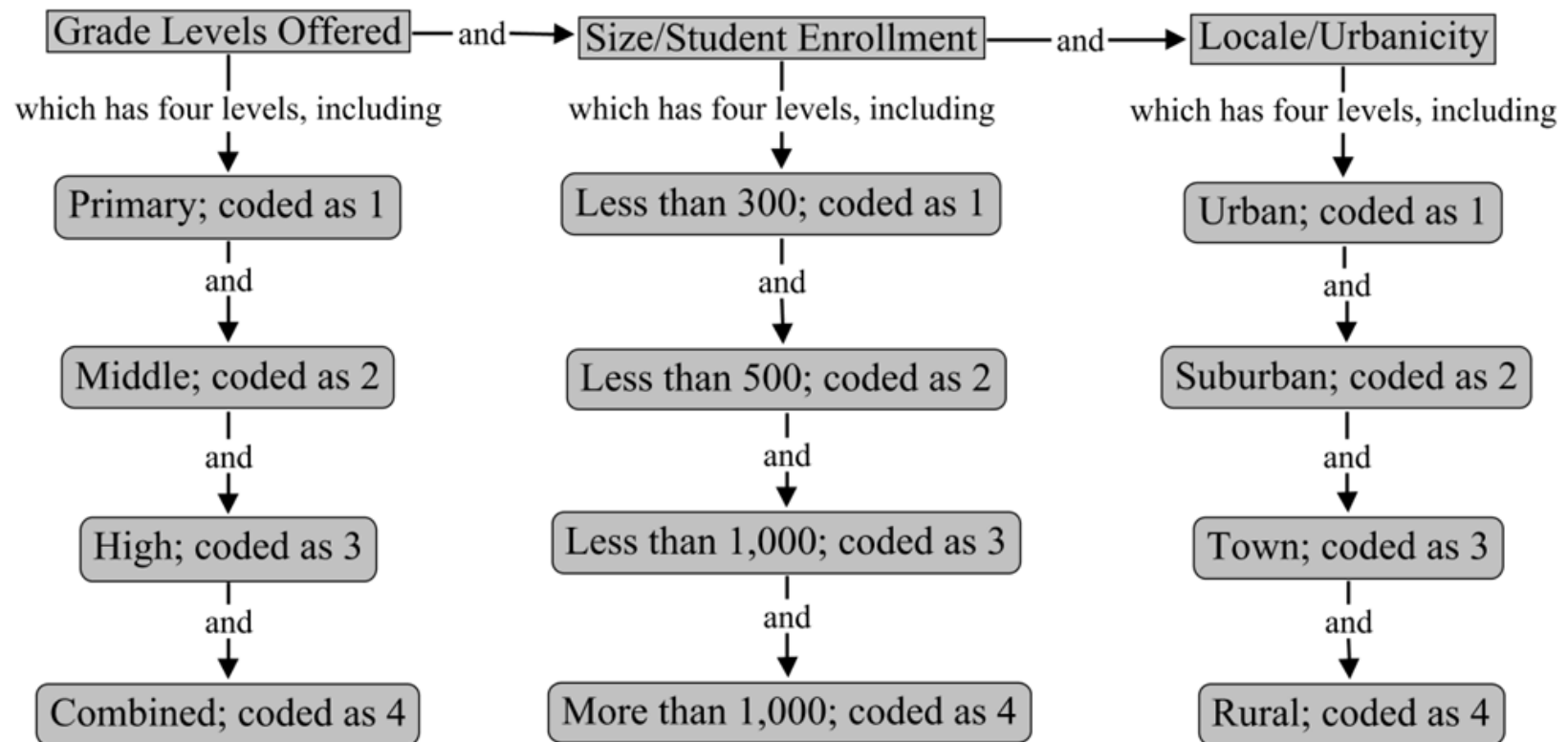


Figure 4. Potential contextual factors associated with Teacher Victimization.

Chapter Four: Results

The purpose of this chapter is to present the results of an analysis of person-related, environment-related, and contextual factors associated with a behavior-related factor of teacher victimization by students. To address the hypotheses, measurement and structural models will be analyzed.

Preliminary Information

Preliminary descriptive statistics revealed much variation across schools in certain selected variables. For instance, generally schools with higher percentages of students (a) who were likely to go to college, (b) for whom academic achievement was important, and (c) who did not score below the fifteenth percentile on standardized tests had lower frequencies of behaviors consisting of student verbal abuse of teachers, disrespect toward them, and widespread disorder in their classrooms. There also was much variation across schools concerning other selected variables. Specifically, the degree of problems that schools had with an assortment of issues associated with limitations upon their efforts to reduce or prevent crime in their buildings was greater in schools with higher frequencies of behaviors of verbal abuse of teachers, disrespect, and disorder.

Before proceeding further, some background information regarding testing of this study's hypotheses must be offered. Briefly addressed below are mean centering, analytical techniques, and design effects.

Mean centering. Each of the predictor factors was centered (Bickel, 2007; Howell, 1997). Technically, and more specifically, they were grand mean centered—as contrasted, for instance, with group mean centering. One reason for this adjustment was to help make the value of the intercept more understandable, particularly in light of the

transformations which were eventually employed. In this centering process, the grand mean of each predictor factor was simply subtracted from each school's respective predictor score. As a result of the centering process, those schools which previously had average scores on each of their predictor values subsequently had new values of zero. Consequently, for the hypothetically average school (i.e., one with zeros for each of the predictors after grand mean centering), the intercept accordingly represented the value of the outcome variable, TVS.

Analytical techniques. LISREL and SPSS Complex Samples techniques were employed for Hypotheses Two, Three, and Four since complex sampling procedures were used in the development of the SSOCS (Ruddy, Neiman, Hryczaniuk, Thomas, & Parmer, 2010). Regarding the accuracy of parameter estimates, and their associated standard errors, derived from data originating from this survey Ruddy et al. (2010) wrote,

“Estimates derived from a probability sample are subject to sampling error because only a small fraction of the target population has been surveyed. In surveys with complex sampling designs, such as SSOCS, estimates of standard errors that assume simple random sampling typically underestimate the variability in the point estimates” (p. 13).

Design effects. Ruddy, Neiman, Hryczaniuk, Thomas, and Parmer (2010) later explained the concept of design effects as they relate to variances calculated under two different survey sampling conditions. “The design effect of a survey estimate is defined as the ratio of the variance of the estimate under the sampling design used for the survey to the variance of the estimate under simple random sampling” (Ruddy et al., 2010, p.

17). The design effect, also known as DEFF (Ruddy et al., 2010), of each parameter is presented in the next-to-last column in the tables of results of upcoming analyses.

To offset the effects of squaring, which occurred in the calculations of variances, the square root of DEFF (also known as DEFT; Ruddy et al.) puts the squared values back into their previous metrics.² The square root of DEFF (i.e., DEFT) is listed in the far right column of the tables of parameter estimates. Bell, Onwuegbuzie, Ferron, Jiao, Hibbard, and Kromrey (2012) wrote,

“The obtained standard error of a statistic, computed assuming simple random sampling, is multiplied by the square root of the DEFF (often called the design factor) to obtain an improved estimate of the actual standard error. When the design effect of complex data sources is not accounted for and variances are not estimated appropriately, standard errors are often too small, thereby increasing type I errors” (p. 1400).

Now that the foregoing preliminary background topics have been covered, the following sections discuss the hypotheses. First, the measurement models will be addressed. After that, the structural models will be discussed.

Measurement Models: Principal Components Analyses

Results of the measurement models are presented below. These measurement models present relationships between variables and their respective factors.

First Set of Hypotheses

Hypothesis One stated: If selected survey items are analyzed, then three major construct factors will be identified. To test this hypothesis, correlations among the three

² This DEFF/DEFT relationship is analogous to the variance/standard deviation relationship (D. Carran, personal communication, 2013-12-18).

factors of (a) behavior-related variables, (b) person-related variables, and (c) environment-related variables are presented.

Table 1

Pearson Correlations of Survey Items Comprising TVS (Behavior, 1-3), Student Academic Orientation (Person, 4-6), and Limitations on Schools' Efforts to Reduce or Prevent Crime (Environment, 7-19)

	Behavior		Person		Environment											
	2	3	5	6	8	9	10	11	12	13	14	15	16	17	18	19
1	.515	.613														
2		.456														
4			-.224	-.240												
5				.645												
7					.438	.365	.470	.414	.342	.317	.383	.467	.338	.271	.320	.339
8						.328	.325	.385	.290	.343	.458	.390	.271	.407	.333	.346
9							.386	.518	.315	.428	.339	.323	.377	.264	.332	.348
10								.585	.460	.392	.310	.576	.439	.298	.340	.338
11									.386	.415	.417	.493	.405	.347	.386	.389
12										.468	.312	.447	.423	.247	.342	.319
13											.412	.372	.530	.334	.379	.379
14												.363	.310	.362	.325	.346
15													.417	.316	.338	.329
16														.340	.493	.481
17															.619	.599
18																.835

Note. **Behavior:** 1. How often student verbal abuse of teachers; 2. How often widespread disorder in classrooms; 3. How often student acts of disrespect for teachers-not verbal abuse; **Person:** 4. Percentage students below 15th percentile standardized tests; 5. Percentage students likely to go to college; 6. Percentage students academic achievement important; **Environment:** 7. Inadequate/lack of teacher training; 8. Inadequate/lack of alternative placement; 9. Parental complaints; 10. Inadequate/lack of teacher support; 11. Inadequate/lack of parent support; 12. Fear of student retaliation; 13. Fear of litigation; 14. Inadequate funds; 15. Inconsistent application of policies; 16. Fear of district or state reprisal; 17. Fed policies/special ed; 18. Other federal policies-not special ed; 19. Other state/district policies-not special ed

Sub-hypothesis 1.1 Principal Components Analysis of Teacher Victimization by Students (TVS). This sub-hypothesis stated: If selected behavior-related survey items are analyzed, then a construct factor of teacher victimization by students (TVS) will be identified. Correlations of the three behavior-related variables which measured frequencies of teacher victimization by students (TVS) are shown in Table 1. These variables were significantly positively related ($p < .001$; $N = 82,999$). One moderate and two large relationships were found.³

A Principal Components Analysis (PCA) of variables related to TVS was performed. Assumptions of TVS were met with a Kaiser-Meyer-Olkin (KMO) value greater than 0.5 (in this case, .679) and a significant Bartlett's Test of Sphericity $\chi^2(3, N = 82,999) = 68,382.52, p < .001$, supporting one or more latent factors for TVS. One factor was identified with an Eigenvalue greater than 1.00 which accounted for 68.64% of the variance. Figure 5 presents the loadings of the measured variable indicators onto the latent factor, TVS. All items had loadings larger than .78.

Factor scores were computed by summing the values of the three behavior-related survey item variables. Data screening indicated that the factor scores were skewed and kurtotic. Because of this, these scores were transformed using reflection and log10 procedures. The estimated population parameters for TVS were $N = 82,999$, $M = 0.454$, $SD = 0.262$, $Min. = 0.00$, and $Max. = 1.11$.

³ Cohen's (1992, p. 157) criteria: Small $r = .10$; Moderate $r = .30$; Large $r = .50$

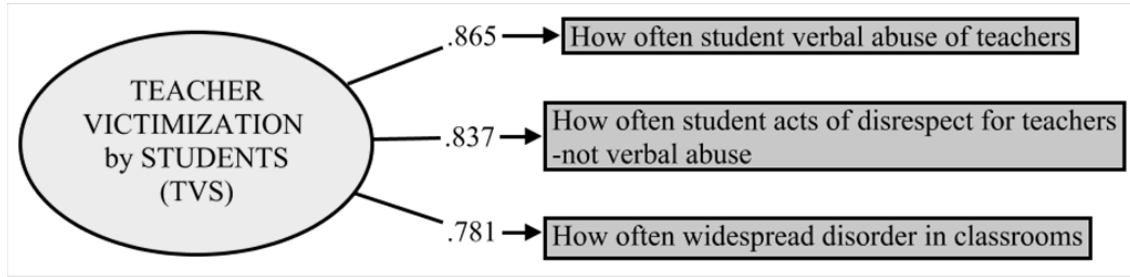


Figure 5. Loadings of measured variable indicators of the latent factor Teacher Victimization by Students (TVS).

Sub-hypothesis 1.2 Principal Components Analysis of Student Academic

Orientation. This sub-hypothesis stated: If selected person-related survey items are analyzed, then a construct factor of student academic orientation will be identified.

Correlations among three person-related variables ($p < .001$; $N = 82,999$) which measured student academic orientation are also shown in Table 1. One large correlation and two small ones were found among these variables.

Based on the correlations among these three variables, one of them (SSOCS survey item C0532) was reversed coded. This newly recoded variable no longer measured the percentage of students who scored below the 15th percentile on standardized tests, but rather the percentage of students who scored **at the 15th percentile or above** on standardized tests. Consequently, associations among all three variables had signs in the same direction (i.e., they were all positively correlated).

A PCA was run on variables related to this factor. Assumptions of Student Academic Orientation were met with a KMO of .558 and a significant Bartlett's Test $\chi^2(3, N = 82,999) = 50,224.40, p < .001$, supporting one or more latent factors for Student Academic Orientation. One factor was identified with an Eigenvalue greater than 1.00 which accounted for 59.41% of the variance. Figure 6 shows the loadings of the

measured variable indicators onto the latent factor, Student Academic Orientation (SAO). All items had loadings larger than .51.

Factor scores were computed by the regression method in the factor score option of the PCA software features in SPSS. These scores were examined and determined to be skewed. The scores were transformed using reflection and log10 procedures. The estimated population parameters for Student Academic Orientation were $N = 82,999$, $M = 0.402$, $SD = 0.163$, $Min. = 0.00$, and $Max. = 0.84$.

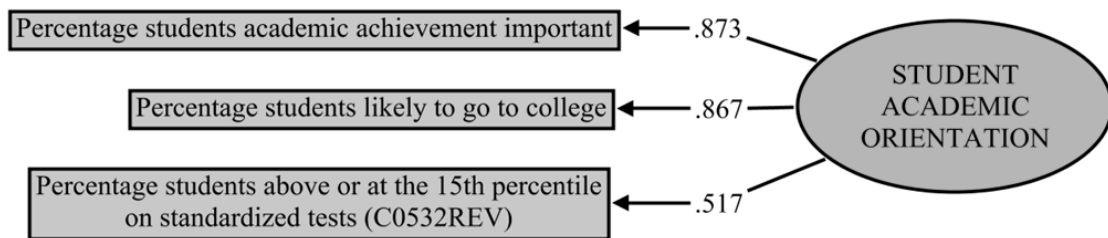


Figure 6. Loadings of measured variable indicators of the latent factor Student Academic Orientation.

Sub-hypothesis 1.3 Principal Components Analysis of Environment-Related Survey Items. This sub-hypothesis stated: If selected environment-related survey items are analyzed, then construct factors of limitations on schools' efforts to reduce or prevent crime within their buildings will be identified. Correlations of environment-related variables which measured limitations on schools' efforts to reduce or prevent crime are shown in Table 1. All variables were significantly positively correlated ($p < .001$; $N = 82,999$). Seven large, sixty-five medium, and six small correlations were found.

Lack of Support. A PCA was run on variables related to this factor. Assumptions of Lack of Support were met with a KMO of .696 and a significant Bartlett's Test $\chi^2(3, N = 82,999) = 72,929.87$, $p < .001$, supporting one or more latent factors for Lack of Support. One factor was identified with an Eigenvalue greater than 1.00 which

accounted for 70.12% of the variance. Figure 7 shows the loadings of the measured variable indicators onto the latent factor, Lack of Support. All items had loadings equal to or larger than .82.

Factor scores were computed by the regression method as part of the PCA calculations. These scores were examined and determined to be skewed and kurtotic. The scores were transformed using reflection and inverse procedures. The estimated population parameters for Lack of Support were $N = 82,999$, $M = 0.665$, $SD = 0.288$, $Min. = 0.20$, and $Max. = 1.00$.

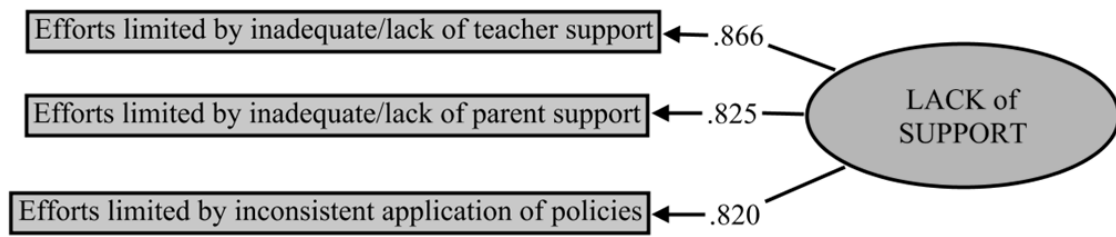


Figure 7. Loadings of measured variable indicators of the latent factor Lack of Support.

Fear. A PCA was run on variables related to this factor. Assumptions of Fear were met with a KMO of .760 and a significant Bartlett's Test $\chi^2(6, N = 82,999) = 73,516.39, p < .001$, supporting one or more latent factors for Fear. One factor was identified with an Eigenvalue greater than 1.00 which accounted for 56.97% of the variance. Figure 8 shows the loadings of the measured variable indicators onto the latent factor, Fear. All items had loadings larger than .68.

Factor scores were computed by the regression method as part of the PCA calculations. These scores were examined and determined to be skewed and kurtotic. The scores were transformed using reflection and inverse procedures. The estimated population parameters for Fear were $N = 82,999$, $M = 0.711$, $SD = 0.288$, $Min. = 0.16$, and $Max. = 1.00$.

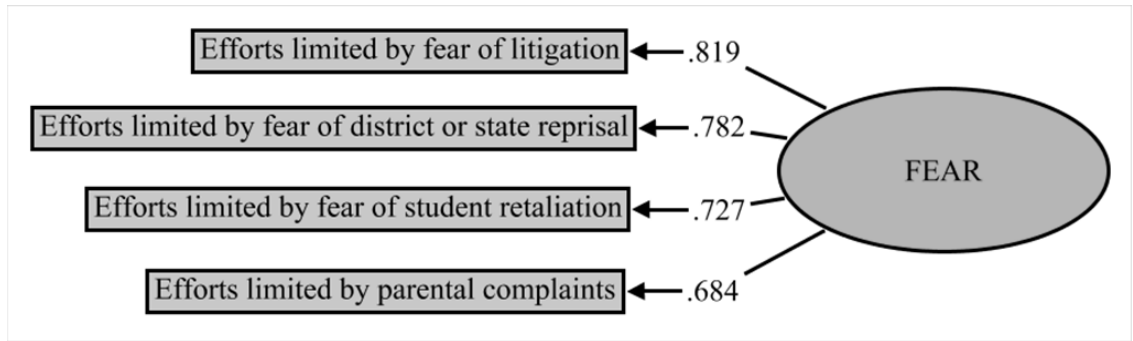


Figure 8. Loadings of measured variable indicators of the latent factor Fear.

Lack of Resources. A PCA was run on variables related to this factor.

Assumptions of Lack of Resources were met with a KMO of .665 and a significant Bartlett's Test $\chi^2(3, N = 82,999) = 41,687.18, p < .001$, supporting one or more latent factors for Lack of Resources. One factor was identified with an Eigenvalue greater than 1.00 which accounted for 61.79% of the variance. Figure 9 shows the loadings of the measured variable indicators onto the latent factor, Lack of Resources. All items had loadings larger than .76.

Factor scores were computed by the regression method as part of the PCA calculations. These scores were examined and determined to be skewed and kurtotic. The scores were transformed using reflection and square root procedures. The estimated population parameters for Lack of Resources were $N = 82,999$, $M = 1.483$, $SD = .334$, $Min. = 1.00$, and $Max. = 2.14$.

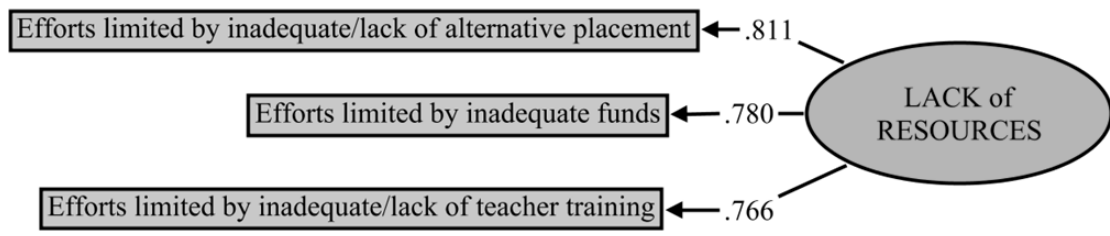


Figure 9. Loadings of measured variable indicators of the latent factor Lack of Resources.

External Policies on Disciplining Students. APCA was run on variables related to this factor. Assumptions of External Policies on Disciplining Students were met with a KMO of .688 and a significant Bartlett's Test $\chi^2(3, N = 82,999) = 142,483.41, p < .001$, supporting one or more latent factors for External Policies on Disciplining Students. One factor was identified with an Eigenvalue greater than 1.00 which accounted for 79.17% of the variance. Figure 10 shows the loadings of the measured variable indicators onto the latent factor, External Policies on Disciplining Students. All items had loadings larger than .81.

Factor scores were computed by the regression method as part of the PCA calculations. These scores were examined and determined to be skewed and kurtotic. The scores were transformed using reflection and inverse procedures. The estimated population parameters for External Policies on Disciplining Students were $N = 82,999$, $M = 0.666$, $SD = 0.295$, $Min. = 0.22$, and $Max. = 1.00$.

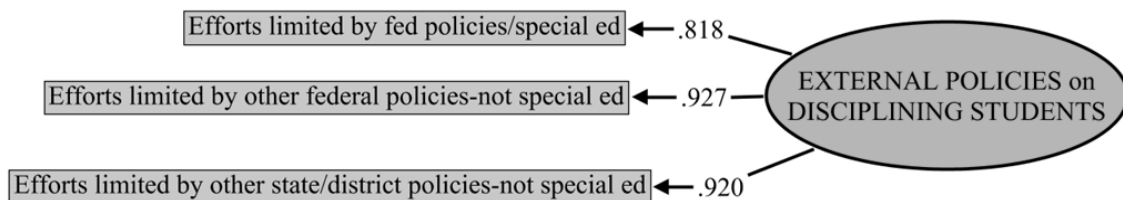


Figure 10. Loadings of measured variable indicators of the latent factor External Policies on Disciplining Students.

Hypotheses Two, Three, and Four will be addressed next. Hypothesis Two was concerned with predicting TVS from a person-related factor. Hypothesis Three had to do with predicting TVS from each of four individual environment-related factors. Hypothesis Four tested whether the person- and environment-related factors, in combination, predicted TVS. Sample design information for each of these analyses

included: Units = 2560 (schools), Strata = 60 (groups of schools), $df = 2500$, $N = 82,999$ (U.S. public schools). Model fit information for each of these analyses included: Full Information Maximum Likelihood $\chi^2(0, N = 82,999) = 0.0, p = 1.00$; Root Mean Square Error of Approximation (RMSEA) = 0.0. The hypotheses were tested using the following model:

$$TVS = \beta_0 + \beta_1 X_1 + error$$

Second Hypothesis

Hypothesis Two: If schools have higher measures of student academic orientation, then they will experience lower frequencies of TVS. The structural equation derived from these data was:

$$TVS = 0.454 + 0.496 * GMSAO + 0.062$$

The estimated population parameters for TVS were $M = 0.454$ ($s^2 = 0.07$). For GMSAO they were $M = 0.000$ ($s^2 = 0.03$). Tests of model effects and of parameter estimates are shown in Table 2 and Table 3, respectively. A small positive correlation ($r = .103$) between GMSAO and the intercept was found. The person-related factor GMSAO along with the intercept significantly positively predicted the behavior-related outcome TVS. A higher GMSAO score meant lower percentages of students who were academically oriented. A higher TVS score meant higher frequency of teacher victimization by students. Thus, schools with lower student academic orientation predicted more frequent TVS. Conversely, as displayed in Figure 11, the inference from the current study is that schools with greater student academic orientation predicted less

frequent TVS. In summary, support was found for Hypothesis Two, although the effect size was small⁴ ($R^2 = .095$; Cohen's $f^2 = .105$).

Table 2

Tests of Model Effects.

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	1.000	2500.000	161.462	.000	.000
(Intercept)	1.000	2500.000	4875.870	.000	.000
GMSAO	1.000	2500.000	161.462	.000	.000

Table 3

Parameter Estimates.

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test			Design Effect	Square Root Design Effect
			Lower	Upper	t	df	Sig.		
(Intercept)	.454	.006	.441	.466	69.827	2500.000	.000	1.802	1.342
GMSAO	.496	.039	.420	.573	12.707	2500.000	.000	1.772	1.331

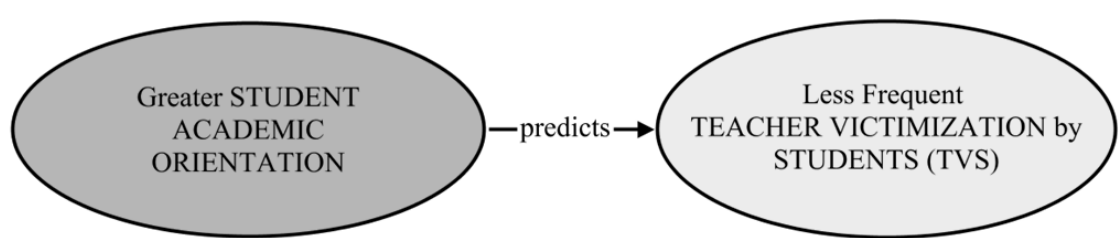


Figure 11. Support for hypothesis two: Greater Student Academic Orientation predicts, with a small effect size, less frequent TVS.

⁴ Cohen's $f^2 = R^2 / 1 - R^2$; Criteria for effect size labels: Small = .02; Medium = .15; Large = .35 (Cohen, 1992, p. 157)

Third Hypothesis

Hypothesis Three stated: If schools have greater limitations on their efforts to reduce or prevent crime within their buildings, then they will experience higher frequencies of TVS.

Sub-hypothesis 3.1: If schools have greater limitations, arising from lack of support for school policies, on their efforts to reduce or prevent crime then they will experience higher frequencies of TVS. The structural equation was:

$$TVS = 0.454 - .339 * GMLSUPP + 0.059$$

The estimated population parameters for TVS were $M = 0.454$ ($s^2 = 0.07$). For GMLSUPP they were $M = 0.000$ ($s^2 = 0.08$). Tests of model effects and of parameter estimates are shown in Table 4 and Table 5, respectively. A very small negative correlation ($r = -.033$) between GMLSUPP and the intercept was found. The intercept significantly positively predicted, and the environment-related factor GMLSUPP significantly negatively predicted, the behavior-related outcome TVS. A lower GMLSUPP score meant that lack of support was a greater limitation on the school's efforts to reduce or prevent crime. A higher TVS score meant higher frequency of teacher victimization by students. Thus, as displayed in Figure 12, the inference from the current study is that schools which experience greater limitations arising from lack of support predict more frequent TVS. In summary, support was found for Hypothesis 3.1; the effect size was medium ($R^2 = .140$; Cohen's $f^2 = .163$).

Table 4

Tests of Model Effects

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	1.000	2500.000	212.091	.000	.000
(Intercept)	1.000	2500.000	4847.500	.000	.000
GMLSUPP	1.000	2500.000	212.091	.000	.000

Table 5

Parameter Estimates.

Parameter	Estimate	Std.	95% Confidence		Hypothesis Test			Design	Square
		Error	Interval					Effect	Root
			Lower	Upper	t	df	Sig.		Design Effect
(Intercept)	.454	.007	.441	.466	69.624	2500.000	.000	1.906	1.381
GMLSUPP	-.339	.023	-.385	-.294	-14.563	2500.000	.000	1.957	1.399

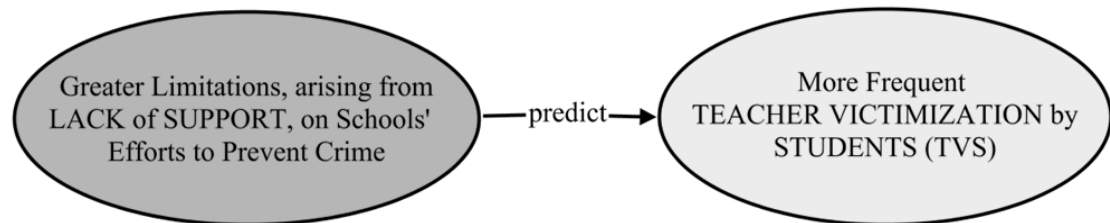


Figure 12. Support for Sub-hypothesis 3.1: Greater limitations, arising from Lack of Support, on schools' efforts to reduce or prevent crime predict with a medium effect size, more frequent TVS.

Sub-hypothesis 3.2: If schools have greater limitations, arising from fear, on their efforts to reduce or prevent crime then they will experience higher frequencies of TVS. The structural equation was:

$$TVS = 0.454 - .290*GMFEAR + 0.061$$

The estimated population parameters for TVS were $M = 0.454$ ($s^2 = 0.07$). For GMFEAR they were $M = 0.000$ ($s^2 = 0.08$). Tests of model effects and of parameter estimates are shown in Table 6 and Table 7, respectively. A very small negative correlation ($r = -.071$) between GMFEAR and the intercept was found. The intercept significantly positively predicted, and the environment-related factor GMFEAR significantly negatively predicted, the behavior-related outcome TVS. A lower GMFEAR score meant that fear was a greater limitation on the school's efforts to reduce or prevent crime. A higher TVS score meant higher frequency of teacher victimization by students. Thus, as displayed in Figure 13, the inference from the current study is that schools which experience greater limitations arising from fear predict more frequent TVS. In summary, support was found for Hypothesis 3.2; the effect size was small ($R^2 = .102$; Cohen's $f^2 = .114$).

Table 6

Tests of model effects

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	1.000	2500.000	145.815	.000	.000
(Intercept)	1.000	2500.000	4912.787	.000	.000
GMFEAR	1.000	2500.000	145.815	.000	.000

Table 7

Parameter estimates

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test			Design Effect	Square Root Design Effect
			Lower	Upper	t	df	Sig.		
(Intercept)	.454	.006	.441	.466	70.091	2500.000	.000	1.801	1.342
GMFEAR	-.290	.024	-.337	-.243	-12.075	2500.000	.000	2.006	1.416

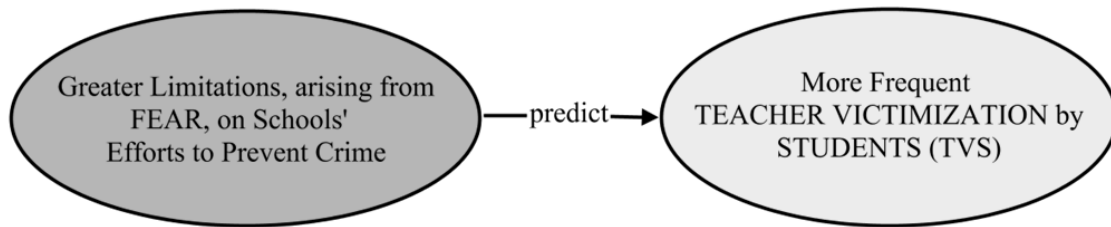


Figure 13. Support for Sub-hypothesis 3.2: Greater limitations, arising from Fear, on schools' efforts to reduce or prevent crime predict with a small effect size, more frequent TVS.

Sub-hypothesis 3.3: If schools have greater limitations, arising from Lack of Resources, on their efforts to reduce or prevent crime, then they will experience higher frequencies of TVS. The structural equation was:

$$TVS = 0.454 + .322 * GMLRESO + 0.057$$

The estimated population parameters for TVS were $M = 0.454$ ($s^2 = 0.07$). For GMLRESO they were $M = 0.000$ ($s^2 = 0.11$). Tests of model effects and of parameter estimates are shown in Table 8 and Table 9, respectively. A very small positive correlation ($r = .018$) between GMLRESO and the intercept was found. The intercept

and the environment-related factor GMLRESO significantly positively predicted the behavior-related outcome TVS. A higher GMLRESO score meant that lack of resources was a greater limitation on the school's efforts to reduce or prevent crime. A higher TVS score meant higher frequency of teacher victimization by students. Thus, as displayed in Figure 14, the inference from the current study is that schools which experience greater limitations arising from lack of resources predict more frequent TVS. In summary, support was found for Hypothesis 3.3; the effect size was medium ($R^2 = .170$; Cohen's $f^2 = .205$).

Table 8

Tests of Model Effects

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	1.000	2500.000	272.795	.000	.000
(Intercept)	1.000	2500.000	5323.174	.000	.000
GMLRESO	1.000	2500.000	272.795	.000	.000

Table 9

Parameter Estimates

Parameter	Estimate	Std.	95% Confidence		Hypothesis Test			Design	Square
		Error	Interval		t	df	Sig.	Effect	Root
		Lower	Upper	Design					
								Effect	
(Intercept)	.454	.006	.442	.466	72.960	2500.000	.000	1.799	1.341
GMLRESO	.322	.020	.284	.361	16.516	2500.000	.000	1.929	1.389

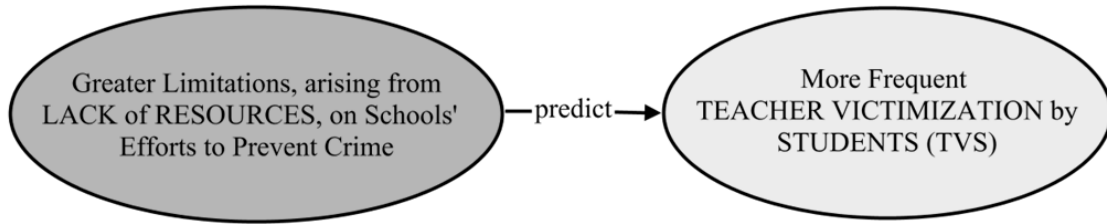


Figure 14. Support for Sub-hypothesis 3.3: Greater limitations, arising from Lack of Resources, on schools' efforts to reduce or prevent crime predict with a medium effect size, more frequent TVS.

Sub-hypothesis 3.4: If schools have greater limitations, arising from external policies on disciplining students, on their efforts to reduce or prevent crime then they will experience higher frequencies of TVS. The structural equation was:

$$TVS = 0.454 - .256 * GMEPDS + 0.063$$

The estimated population parameters for TVS were $M = 0.454$ ($s^2 = 0.07$). For GMEPDS they were $M = 0.000$ ($s^2 = 0.09$). Tests of model effects and of parameter estimates are shown in Table 10 and Table 11, respectively. A very small negative correlation ($r = -.021$) between GMEPDS and the intercept was found. The intercept significantly positively predicted, and the environment-related factor GMEPDS significantly negatively predicted, the behavior-related outcome TVS. A lower GMEPDS score meant that external policies on disciplining students was a greater limitation on the school's efforts to reduce or prevent crime. A higher TVS score meant higher frequency of teacher victimization by students. Thus, as displayed in Figure 15, the inference from the current study is that schools which experience greater limitations arising from external policies on disciplining students predict more frequent TVS. In summary, support was found for Hypothesis 3.4 although the effect size was small ($R^2 = .083$; Cohen's $f^2 = .091$).

Table 10

Tests of Model Effects

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	1.000	2500.000	113.650	.000	.000
(Intercept)	1.000	2500.000	4756.070	.000	.000
GMEPDS	1.000	2500.000	113.650	.000	.000

Table 11

Parameter Estimates

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test			Design Effect	Square Root Design Effect
			Lower	Upper	t	df	Sig.		
(Intercept)	.454	.007	.441	.467	68.964	2500.000	.000	1.822	1.350
GMEPDS	-.256	.024	-.303	-.209	-10.661	2500.000	.000	2.030	1.425

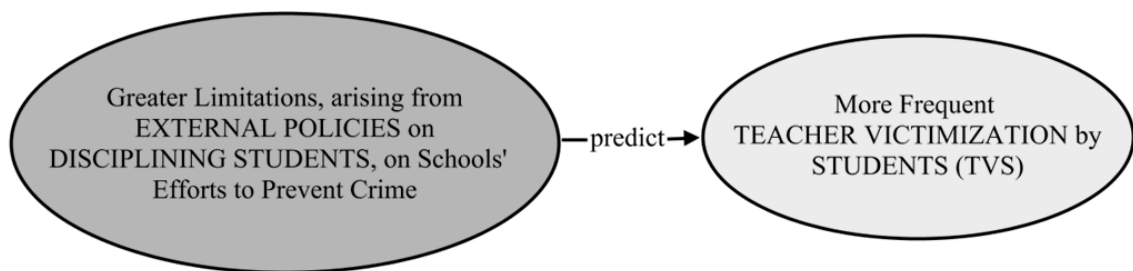


Figure 15. Support for Sub-hypothesis 3.4: Greater limitations, arising from External Policies on Disciplining Students, on schools' efforts to reduce or prevent crime, predict with a small effect size, more frequent TVS.

Summary of Hypothesis Three. All coefficients were statistically significant. There were two medium effect sizes using Cohen's f^2 : Lack of Support and Lack of Resources, both of which were environment-related factors. The remaining two environment-related factors, Fear and External Policies on Disciplining Students, as well as the sole person-related factor, Student Academic Orientation, had small effect sizes.

Fourth Hypothesis

Hypothesis Four: If a linear combination of school level person-related and environment-related factor measures are entered into an equation, then frequencies of a behavior-related factor of TVS will be predicted. This hypothesis was tested using the following model.

$$TVS = \beta_0 + \beta_1 GMSAO + \beta_2 GMLSUPP + \beta_3 GMFEAR + \beta_4 GMLRESO + \beta_5 GMEPDS + error$$

The structural equation was:

$$TVS = 0.454 + .300 * GMSAO - .128 * GMLSUPP - 0.036 * GMFEAR + .176 * GMLRESO - .042 * GMEPDS + 0.053$$

The estimated population parameters for TVS were $M = 0.454$ ($s^2 = 0.07$). For GMSAO they were $M = 0.000$ ($s^2 = 0.03$). For GMLSUPP they were $M = 0.000$ ($s^2 = 0.08$). For GMFEAR they were $M = 0.000$ ($s^2 = 0.08$). For GMLRESO they were $M = 0.000$ ($s^2 = 0.11$). For GMEPDS they were $M = 0.000$ ($s^2 = 0.09$). Tests of model effects and of parameter estimates are shown in Table 12 and Table 13, respectively. Correlations among the parameter estimates are shown in Table 14. Two of the relationships had magnitudes (rounded to two digits) greater than or equal to .30: GMLSUPP with LRESO and GMLSUPP with GMFEAR.

The intercept, the person related factor GMSAO, and the environment-related factor GMLRESO significantly positively predicted the behavior-related outcome TVS. A higher GMSAO score indicated a lower percentage of student academic orientation. A higher GMLRESO score indicated that lack of resources was a greater limitation on the school's efforts to reduce or prevent crime. The environment-related factor GMLSUPP significantly negatively predicted TVS. A lower GMLSUPP score indicated that lack of support was a greater limitation on the school's efforts to reduce or prevent crime. In all of these relationships, a higher TVS score indicated a higher frequency of teacher victimization by students. Notably, the environment-related factors GMFEAR and GMEPDS did not significantly predict TVS.

As explained earlier, the predictors were grand mean centered. Consequently, for the hypothetical average school, in which all of the predictors in the model had values of 0.000, the intercept was equal to the TVS outcome value, 0.454. As displayed in Figure 16, findings from the current study imply that schools which have lower Student Academic Orientation and which experience greater limitations arising from Lack of Support and from Lack of Resources predict more frequent occurrences of TVS. To summarize, partial support was found for Hypothesis Four. The effect size was medium ($R^2 = .230$; Cohen's $f^2 = .299$).

Table 12

Tests of Model Effects

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	4.952	12379.822	85.289	.000	.000
(Intercept)	1.000	2500.000	5613.725	.000	.000
GMSAO	1.000	2500.000	58.124	.000	.000
GMLSUPP	1.000	2500.000	20.562	.000	.000
GMFEAR	1.000	2500.000	1.613	.204	.204
GMLRESO	1.000	2500.000	46.290	.000	.000
GMEPDS	1.000	2500.000	2.682	.102	.102

Table 13

Parameter Estimates

Parameter	Estimate	Std. Error	95% Confidence Interval		Hypothesis Test			Design Effect	Square Root Design Effect
			Lower	Upper	t	df	Sig.		
(Intercept)	.454	.006	.442	.466	74.925	2500.000	.000	1.838	1.356
GMLSUPP	-.128	.028	-.184	-.073	-4.535	2500.000	.000	1.711	1.308
GMFEAR	-.036	.029	-.092	.020	-1.270	2500.000	.204	1.760	1.326
GMLRESO	.176	.026	.125	.227	6.804	2500.000	.000	1.885	1.373
GMEPDS	-.042	.026	-.093	.008	-1.638	2500.000	.102	1.920	1.386
GMSAO	.300	.039	.222	.377	7.624	2500.000	.000	1.837	1.355

Table 14

Correlations of Parameter Estimates

	(Intercept)	GMLSUPP	GMFEAR	GMLRESO	GMEPDS	GMSAO
GMLSUPP	-.004	---				
GMFEAR	-.084	-.298	---			
GMLRESO	-.066	.368	.252	---		
GMEPDS	-.002	-.054	-.216	.223	---	
GMSAO	.036	.066	-.035	-.223	.087	---

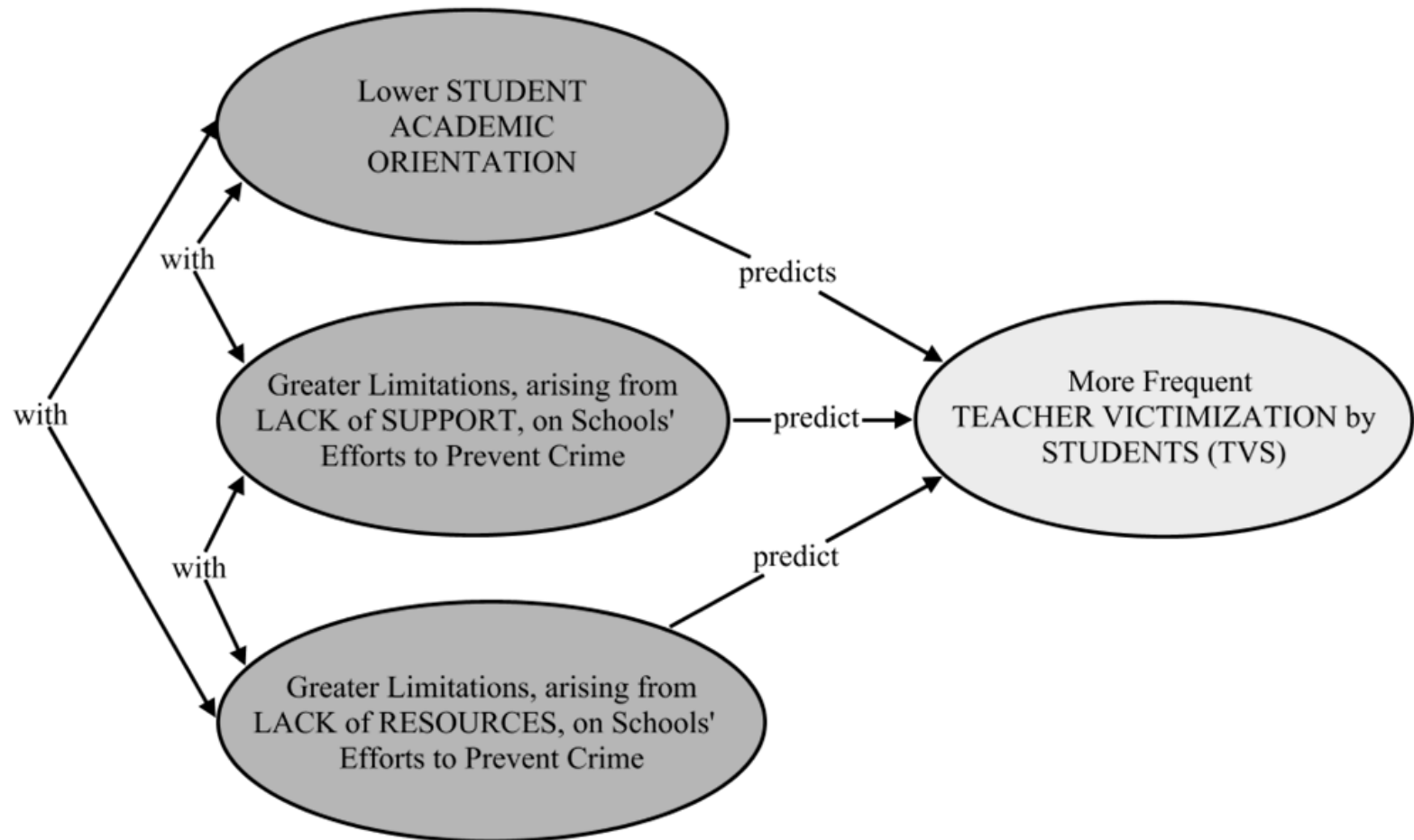


Figure 16. Partial support for Hypothesis Four: Lower Student Academic Orientation in combination with greater limitations, arising from Lack of Support and Lack of Resources, on schools' efforts to reduce or prevent crime, predict with a medium effect size, more frequent Teacher Victimization by Students (TVS).

Summary of the Measurement and Structural Models

There are three major interpretations which can be summarized. First, regarding the measurement model, selected variables statistically loaded onto behavior-related, person-related, and environment-related factors. Second, with respect to the structural model, a person-related factor of Student Academic Orientation, as well as two environment-related factors of Lack of Support and Lack of Resources, were significant predictors of a behavior-related factor of Teacher Victimization by Students (TVS). Specifically, in schools where Lack of Support and Lack of Resources were greater limitations on schools' efforts to reduce or prevent crime, and in those same schools where Student Academic Orientation was lower, TVS occurred with higher frequency. In contrast to these findings, two environment-related factors of Fear and External Policies on Disciplining Students were not significant predictors of TVS. Third, this statistical model accounted for 23% of the total variance in the behavior-related outcome factor, TVS. The next section of this chapter addresses the fifth and final hypothesis investigating school context of the behavior, TVS.

The Fifth Hypothesis

Hypothesis Five: If three contextual variables of school Level of Instruction, Size, and Urbanicity are included in the model, then frequencies of a behavior-related factor of TVS will be predicted.

In Chapters One and Two it was established that the three variables of school (a) Level of Instruction (LOI), (b) Size (student enrollment), and (c) Urbanicity (locale) were important elements regarding the context of student behavior. In the current study, each of these contextual variables was composed of four levels of categories. A Complex

Samples General Linear Model (CSGLM) analysis of the data was performed using SPSS 21. This type of statistical analysis was appropriate since complex sampling procedures were used in the development of the SSOCS (Ruddy, Neiman, Hryczaniuk, Thomas, & Parmer, 2010), and since this type of model accommodates measures of both continuous data covariates, as well as multi-categorical factors. The model was:

$$TVS = \textit{Intercept} + \textit{GMSAO} + \textit{GMLSUPP} + \textit{GMFEAR} + \textit{GMLRESO} + \textit{GMEPDS} + \textit{LOI} + \textit{SIZE} + \textit{LOCALE}$$

As in the previous models, sample design information for this final analysis included: Units = 2560 (schools), Strata = 60 (groups of schools), $df = 2500$, $N = 82,999$ (U.S. public schools). Also, as in the previous models, the estimated population mean for TVS was 0.454, and the estimated means for each of the previously grand mean centered predictors was 0.000. Information about the various levels of each factor, including their counts and percentages, are shown in Table A2. Most of the schools were elementary level. The smallest number of schools was the combined school level. The estimated number of schools throughout the nation with more than 1,000 students was almost 9,300. Most schools had more than 500, but less than 1,000, students. Not quite one-third of the nation's schools were in rural locales. Roughly one quarter were in cities.

Tests of model effects are shown in Table A3 and parameter estimates are shown in Table A4. The intercept was a significant predictor of TVS, as was the person-related factor, Student Academic Orientation. Additionally, three environment-related factors were predictive: Lack of Support, Fear, and Lack of Resources. One environment-related factor, External Policies on Disciplining Students, was not a significant predictor. Regarding contextual variables of school Level of Instruction, Size, and Urbanicity, each was a significant predictor of the behavior-related outcome TVS.

Simple contrasts were run on each of the three contextual factors to test for significant differences between the reference category of each factor and its other categorical levels. For Level of Instruction (LOI) contrasts, the reference category was 3.00 (high school). Means of TVS for Level of Instruction are shown in Table A5. Overall, there was a significant difference across groups (Adjusted Wald $F = 31.014$, $df = 2.386$, $5,963.803$, $p < .001$). Results of the Level of Instruction contrasts are shown in Table A6. Elementary and combined schools had significantly fewer frequencies of TVS than did high schools. Middle and high schools did not differ significantly. For Student Enrollment (school size) contrasts, the reference category was 4.00 (over 1,000). Means of TVS for Student Enrollment are shown in Table A7. Overall, there was a significant difference across groups (Adjusted Wald $F = 9.386$, $df = 2.632$, $6,580.067$, $p < .001$). Results of the school size contrasts are shown in Table A8. Schools with less than 300, less than 500, and less than 1,000 students each had significantly fewer frequencies of TVS than did schools with more than 1,000 students. For school Locale (urbanicity) contrasts, the reference category was 1.00 (urban). Means of TVS for School Urbanicity are shown in Table A9. Overall, there was a significant difference across groups (Adjusted Wald $F = 7.743$, $df = 2.986$, $7,465.589$, $p < .001$). Results of the school urbanicity contrasts are shown in Table A10. Suburban, small town, and rural schools had significantly fewer frequencies of TVS than did urban schools. Finally, when schools' covariates were fixed at values of 0.000—the average values for each of the predictors—the grand mean of TVS was equal to .486 ($SE = .008$).

To summarize, partial support was found for Hypothesis Five. In general, large urban secondary schools which had problems with Lack of Support, Fear, Lack of

Resources, and lower Student Academic Orientation tended to have the most frequent occurrences of TVS. The effect size was large ($R^2 = .322$; Cohen's $f^2 = .475$). Figure 17 shows the conceptual relationships among the factors and contextual variables.

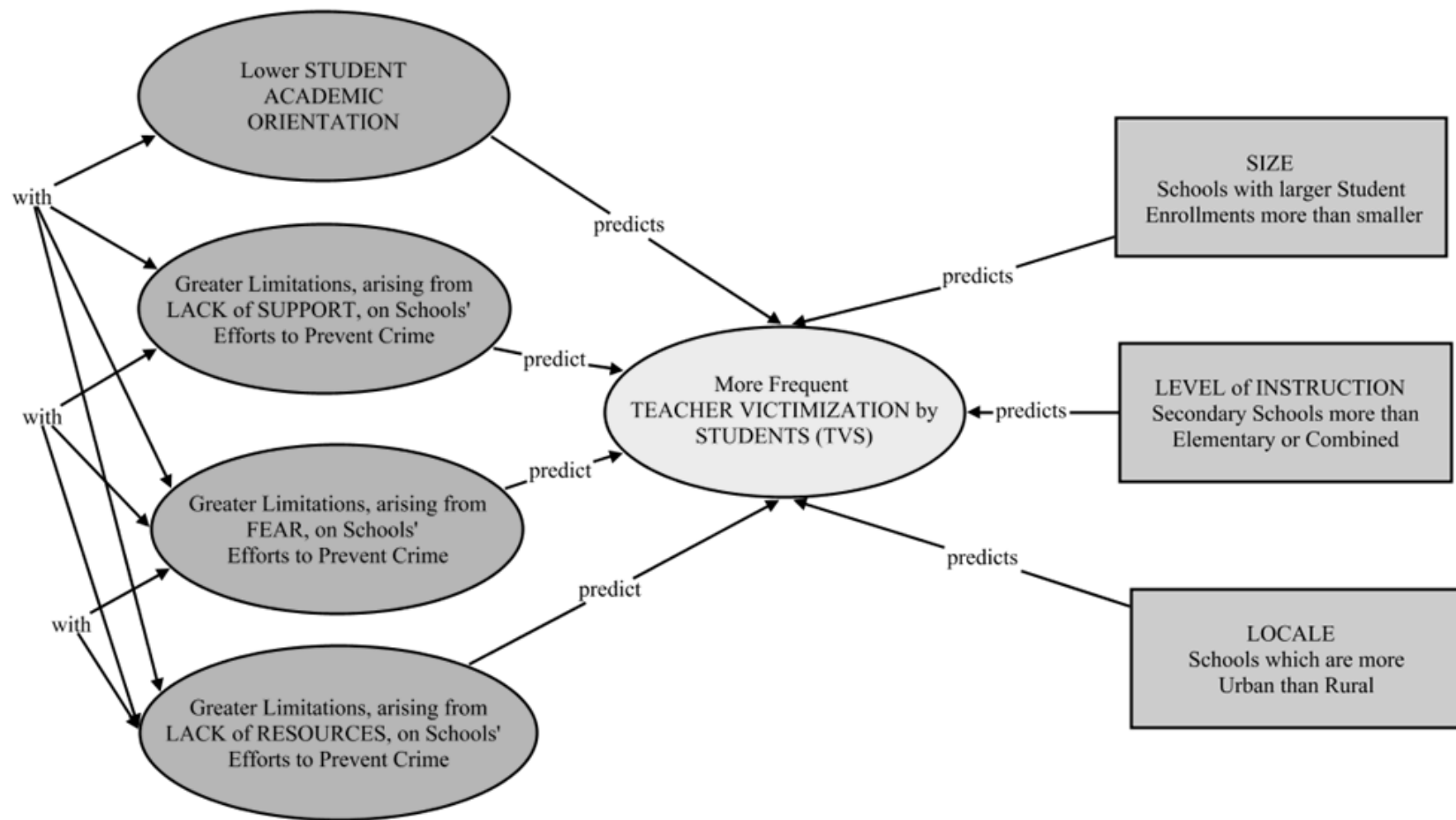


Figure 17. Partial support for Hypothesis Five: One person-related and three environment-related factors as well as three contextual variables predict, with a large effect size, more frequent TVS.

Chapter Summary

The purpose of this chapter was to present the results of an analysis of person-related, environment-related, and contextual factors associated with a behavior-related factor of TVS. To address the study's five hypotheses, measurement and structural models, which ultimately included three school contextual variables, were analyzed. Preliminary descriptive statistics revealed much variation across schools regarding variables selected for this study. Small, medium, and large correlations were found among the variables. The portion of this study concerned with measurement models presented relationships between selected variables and their respective factors, specifically how well the variables loaded onto these factors. The first hypothesis was addressed in the measurement models and three major factors were revealed: one behavior-related, one person-related, and four environment-related.

Support for the first hypothesis. Hypothesis One stated: If selected survey items are analyzed, then three major construct factors will be identified. Support for the first hypothesis was found. Regarding Sub-hypothesis 1.1, selected behavior-related survey items were analyzed. A factor named Teacher Victimization by Students (TVS) was supported by three items. These were: (a) *How often student verbal abuse of teachers*, (b) *How often widespread disorder in classrooms*, and (c) *How often student acts of disrespect for teachers-not verbal abuse*.

Concerning Sub-hypothesis 1.2, selected person-related survey items were analyzed. A factor named Student Academic Orientation was supported by three items. These were: (a) *Percentage students likely to go to college*, (b) *Percentage students*

academic achievement important, and (c) *Percentage students at or above the 15th percentile on standardized tests* (i.e., item C0532 Reverse-coded).

Regarding Sub-hypothesis 1.3, selected environment-related survey items were analyzed. Four construct factors of limitations on schools' efforts to reduce or prevent crime within their buildings were identified. They were named Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students. The factor named Lack of Support was supported by three items. These were: (a) *Efforts limited by inadequate/lack of parent support*, (b) *Efforts limited by inadequate/lack of teacher support*, and (c) *Efforts limited by inconsistent application of policies*. The factor named Lack of Resources was supported by three items. These were: (a) *Efforts limited by inadequate funds*, (b) *Efforts limited by inadequate/lack of teacher training*, and (c) *Efforts limited by inadequate/lack of alternative placement*. The factor named Fear was supported by four items. These were: (a) *Efforts limited by fear of student retaliation*, (b) *Efforts limited by parental complaints*, (c) *Efforts limited by fear of litigation*, and (d) *Efforts limited by fear of district or state reprisal*. The factor named External Policies on Disciplining Students was supported by three items. These were: (a) *Efforts limited by fed policies/special ed*, (b) *Efforts limited by other federal policies-not special ed*, and (c) *Efforts limited by other state/district policies-not special ed*.

Support for the second hypothesis. Hypothesis Two stated: If schools have higher percentages of student academic orientation, then they will experience lower frequencies of TVS. Support was found for this hypothesis; however, the effect size was small.

Support for the third hypothesis. Hypothesis Three stated: If schools have greater problems with limitations on their efforts to reduce or prevent crime within their buildings, then they will experience higher frequencies of TVS. Support was found for this hypothesis through support for each of its Sub-hypotheses, 3.1 through 3.4. Specifically, individual school level limitations on their efforts to reduce or prevent crime arising from Lack of Support and from Lack of Resources, each in separate models, predicted a higher frequency of TVS with medium effect sizes for each analysis. Fear and External Policies on Disciplining Students each predicted a higher frequency of TVS, but with only small effect sizes for each analysis.

Partial support for the fourth hypothesis. Hypothesis Four stated: If a linear combination of school level person-related and environment-related factor measures are entered into an equation, then frequencies of a behavior-related factor of TVS will be predicted. This hypothesis was partially supported. Three factors, one person-related—Student Academic Orientation and two environment-related—Lack of Support and Lack of Resources, significantly predicted TVS. Two environment-related factors, Fear and External Policies on Disciplining Students, were not significant predictors of TVS. The effect size for this structural model, with all the variables combined, was medium.

Partial support for the fifth hypothesis. Hypothesis Five stated: If three contextual variables of school Level of Instruction, Size, and Urbanicity are included in the model, then frequencies of a behavior-related factor of TVS will be predicted. Partial support was found for this hypothesis. The person-related factor, Student Academic Orientation, and three environment-related factors, Lack of Support, Fear, and Lack of Resources, significantly predicted the behavior-related factor TVS. The environment-

related factor, External Policies on Disciplining Students, was not a significant predictor of TVS. Overall, the contextual variables of school Level of Instruction (LOI), Size, and Urbanicity were significant predictors of TVS; however, within LOI, there was not a significant difference between middle and high schools. The effect size for this structural model which tested the fifth hypothesis, with all the variables combined, was large. Chapter Five, the next and final chapter of this study, discusses the preceding results.

Chapter Five: Discussion

The challenge of teacher victimization committed by students at school (TVS) was the primary problem under investigation in this study. Two related issues included limitations on schools' efforts to reduce or prevent crime in their buildings and low percentages of students who were academically oriented toward their educational experience. The purpose of the current study was to examine relationships among these factors—all within the larger context of school level of instruction, school size (based upon student enrollment), and school locale (based upon urbanicity)—variables which previously have been associated with school crime (Miller, 2003).

Chapter Five is the final chapter of this study. It discusses the results which were presented in Chapter Four. First, the findings from the hypotheses which were tested in the current study will be addressed. Following that, theoretical and practical implications of this study will be presented. Next, limitations of the current study will be examined. After that, ideas regarding future research will be offered.

Findings from the Measurement Models

The importance of the measurement models determined how well selected variables from the School Survey on Crime and Safety (SSOCS 2008) loaded onto proposed factors. The first set of hypotheses will be addressed in this section.

Hypothesis One. This hypothesis tested if selected survey items are analyzed, then three major construct factors will be identified. Hypothesis One was addressed through three sub-hypotheses as listed below.

Sub-hypothesis 1.1 tested if selected behavior-related survey items are analyzed, then a construct factor of teacher victimization by students will be identified. After

conducting a principal components analysis (PCA), a behavior-related construct factor named Teacher Victimization by Students (TVS) was identified. Three survey items (SSOCS 2008) successfully loaded onto this factor. They were: (a) *Student verbal abuse of teachers*, (b) *How often student acts of disrespect for teachers-not verbal abuse*, and (c) *Widespread disorder in classrooms*.

Sub-hypothesis 1.2 tested if selected person-related survey items are analyzed, then a construct factor of student academic orientation will be identified. After conducting a PCA, a person-related construct factor named Student Academic Orientation was identified. Three survey items (SSOCS 2008) successfully loaded onto this factor. They measured percentages of students who: (a) were *Likely to go to college after high school*, (b) *Consider academic achievement to be very important*, and (c) were ABOVE or AT the 15th percentile on standardized tests (i.e., Reverse coding of item C0532: *Percentage students below 15th percentile standardized tests*).

Sub-hypothesis 1.3 tested if selected environment-related survey items are analyzed, then construct factors of limitations on schools' efforts to reduce or prevent crime within their buildings will be identified. After conducting a PCA, support for four environment-related construct factors which measured limitations on schools' efforts to reduce or prevent crime (within their buildings) was found. They were named Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students. All of these factors would fall under the environment category of Bandura's (1977; 1986) Triadic Reciprocal Determinism of behavior, person, and environment.

The factor Lack of Support was successfully identified. Three survey items (SSOCS 2008) successfully loaded onto this factor: (a) *Lack of teacher support for*

school policies, (b) Inconsistent application of school policies by faculty or staff, and (c) Lack of parental support for school policies.

The factor Fear was successfully identified. Four survey items (SSOCS 2008) successfully loaded onto this factor: (a) *Teachers' fear of student retaliation*, (b) *Likelihood of complaints from parents*, (c) *Fear of litigation*, and (d) *Fear of district or state reprisal*.

The factor Lack of Resources was successfully identified. Three survey items (SSOCS 2008) successfully loaded onto this factor: (a) *Lack of or inadequate teacher training in classroom management*, (b) *Lack of or inadequate alternative placement/programs for disruptive students*, and (c) *Inadequate funds*.

The factor External Policies on Disciplining Students was successfully identified. Three survey items (SSOCS 2008) successfully loaded onto this factor: (a) *Federal, state, or district policies on disciplining special education students*, (b) *Federal policies on discipline and safety other than those for special education students*, and (c) *State or district policies on discipline and safety other than those for special education students*.

Summary of Hypothesis One. Support for Hypothesis One was found through support of each of its three sub-hypotheses. This suggested that there were common influences or mechanisms underlying the measured survey item variables which constituted each of the separate factor constructs. It was important to the current study that these factor constructs were successfully identified for two reasons. First, for theoretical reasons, they represented the three elements of behavior, person, and environment from Triadic Reciprocal Determinism of Social Cognitive Theory. Second, for practical purposes, once

they were established it meant that associations among the factors could be analyzed. That was accomplished in the next part of the study.

Findings from the Structural Models

The structural models tested relationships between predictors and the outcome. Hypotheses two through five tested structural equations among the variables.

Hypothesis Two. This hypothesis tested if schools have higher percentages of student academic orientation, then they will experience lower frequencies of TVS. Less frequent TVS was found in schools with higher percentages of academically oriented students. Thus, support was found for Hypothesis Two; however, the effect size was small.

Summary of Hypothesis Two. This was the first hypothesis of the current study which tested the relationship between a single predictor by itself and the lone outcome. Additionally, this was the only predictor in the current study which addressed the person (i.e., student) part of the theory. Since student academic orientation did predict TVS, Hypothesis Two was technically supported. This meant that how students thought and felt about the academic aspects of their school experience was in some way related to how often these students mistreated their teachers, and that this relationship was probably not due simply to chance. However, the practical significance of this finding was not as impressive since the small effect size of the relationship meant that even though these two factors were associated, the strength of that association was weak. Finally, it is very important to note that this relationship does not mean that student academic orientation causes TVS.

Hypothesis Three. This hypothesis tested if schools have greater limitations on their efforts to reduce or prevent crime within their buildings, then they will experience higher frequencies of TVS. This hypothesis was addressed through four sub-hypotheses, each sub-hypothesis addressing an identified factor related to limiting a school's efforts to address crime. Overall, support was found for this hypothesis. Schools which experienced greater limitations arising from each individual predictor of (a) Lack of Support, (b) Fear, (c) Lack of Resources, and (d) External Policies on Disciplining Students (modeled separately through the four sub-hypotheses), experienced higher frequencies of TVS. However, effect sizes varied from small to medium as detailed below.

Sub-hypothesis 3.1 tested if schools have greater limitations on their efforts to reduce or prevent crime, arising from lack of support for school policies, then they will experience higher frequencies of TVS. Support was found for Hypothesis 3.1 and the effect size was medium.

Sub-hypothesis 3.2 tested if schools have greater limitations, arising from fear, on their efforts to reduce or prevent crime then they will experience higher frequencies of TVS. Support was found for Hypothesis 3.2; however, the effect size was small.

Sub-hypothesis 3.3 tested if schools have greater limitations, arising from Lack of Resources, on their efforts to reduce or prevent crime, then they will experience higher frequencies of TVS. Support was found for Hypothesis 3.3 and the effect size was medium.

Sub-hypothesis 3.4 tested if schools have greater limitations, arising from external policies on disciplining students, on their efforts to reduce or prevent crime then they will

experience higher frequencies of TVS. Support was found for Hypothesis 3.4; however, the effect size was small.

Summary of Hypothesis Three. Since each of these environment-related factors did predict TVS, Hypothesis Three was technically supported. This meant that the relationships discovered in this portion of the study were probably not due simply to chance. The practical significance of the four environmental factors varied, however. Fear and External Policies on Disciplining Students were not very strongly related to how often teachers were victimized by their students. On the other hand, Lack of Support and Lack of Resources each had comparatively stronger relationships with TVS, but those relationships would still only be considered medium. Again, it is very important to note that these relationships do not mean that the environment-related factors cause TVS.

Hypothesis Four. This hypothesis tested if a linear combination of school level person-related and environment-related factor measures are entered into an equation, then frequencies of a behavior-related factor of TVS will be predicted. Results indicated that schools with Lower Student Academic Orientation in combination with greater limitations arising from Lack of Support and from Lack of Resources experienced more frequent TVS. However, in the same combination with the other predictors, schools which experienced greater limitations arising from Fear and from External Policies on Disciplining Students did not experience significantly higher frequencies of TVS. Thus, partial support was found for Hypothesis Four and the effect size was medium.

Summary of Hypothesis Four. Since three of the five factors were significant predictors of TVS, Hypothesis Four was partially supported. This meant that the relationships between Lack of Support, Lack of Resources, and Student Academic

Orientation with TVS were probably not due simply to chance. However, the relationships between Fear and External Policies on Disciplining Students with TVS were possibly due simply to chance. The strength of the relationships among these factors combined together with TVS would be considered medium. Support for this hypothesis indicated the factors identified under Bandura's model play significant roles in TVS. Again, it is very important to note that these relationships do not mean that the factors cause TVS.

Hypothesis Five. This hypothesis tested if three contextual variables of school Level of Instruction, Size, and Urbanicity are included in the model, then frequencies of a behavior-related factor of TVS will be predicted. The person-related factor, Student Academic Orientation, as well as three environment-related factors—Lack of Support, Fear, and Lack of Resources—predicted higher frequencies of TVS, partially supporting this hypothesis. One environment-related factor, External Policies on Disciplining Students, was not a significant predictor.

Regarding contextual variables of school Level of Instruction, Size, and Urbanicity, each was a significant predictor of the behavior-related outcome TVS for schools with average values on each of the person-related and environment-related factors. With Level of Instruction, simple contrasts revealed that elementary and combined schools had significantly less frequent TVS than did high schools. Middle schools did not differ significantly from high schools. School size contrasts showed that schools with student enrollment categories of less than 300, less than 500, and less than 1,000 students had significantly less frequent TVS than did schools with more than 1,000 students. School urbanicity contrasts, showed that suburban, small town, and rural locale

schools had significantly less frequent TVS than did urban schools. Overall, large urban middle and high schools which experienced problems with Lack of Support, Fear, and Lack of Resources, and which had lower Student Academic Orientation endured the highest frequencies of TVS. Thus, partial support was found for Hypothesis Five and the effect size was large.

Summary of Hypothesis Five. Since most of the factors did predict TVS, Hypothesis Five was partially supported. This meant that the relationships between Lack of Support, Fear, Lack of Resources, and Student Academic Orientation with TVS were probably not due simply to chance. However, the relationship between External Policies on Disciplining Students and TVS was possibly due simply to chance.

The school contextual factors were also related to TVS supporting the results that in general: elementary and combined schools experience less frequent TVS than middle and high schools; smaller schools experience less frequent TVS than larger ones; and schools which are more rural in locale experience less frequent TVS than urban schools. The strength of the relationships of all of these factors combined together with TVS would be considered large.

The purpose of the current study, as presented in Chapter One, was to determine if one person-related factor, multiple environment-related factors, and three contextual factors significantly predicted one behavior-related factor. This purpose was partially achieved through testing of the aforementioned hypotheses of this study. Next, theoretical implications of this investigation's findings will be examined.

Theoretical Implications

Several theoretical implications arose from the findings of this study. Regarding Hypothesis One, the establishment of factor constructs of behavior, person, and environment rooted in Bandura's (1977; 1986) Triadic Reciprocal Determinism of Social Cognitive Theory were supported by the results.

In Hypothesis Two the individual relationship between a person-related factor and the behavior-related factor TVS was examined; in Hypothesis Three, the individual relationships between the three environment-related factors and TVS were studied. Similar types of relationships, which were identified in prior research studies, were generally supported by the current results. Support for the proposition of a positive relationship between higher student academic achievement, which would be a person-related factor in the current study, and better student behavior has been put forth in the professional literature (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Gaskins, Herres, & Kobak, 2012; Miles & Stipek, 2006; Stipek & Miles, 2008), with some exceptions (Algozzine, Wang, and Violette, 2011; Duncan et al., 2007). Regarding lack of parent support, Bandura and Walters' (1959) study of boys' aggression, demonstrated the problem behavior of teacher victimization by students over a half century ago. These boys were verbally abusive and disrespectful toward their teachers. Also, the boys engaged in behavior that, in the current study, would be categorized as classroom disorder. The aggressive boys' parents were not supportive of the schools. Thus, the current study corroborated Bandura and Walters early work.

Regarding hypothesis four, the theoretical framework of Bandura's model was generally supported by the results. The exceptions were factor constructs of Fear and of

External Policies on Disciplining Students. Researchers who have investigated the experience of teacher fear include Holben, Zirkel, and Caskie (2009). They found that some teachers feared being sued for stopping student fights at school. Additionally, fear was one of the unwanted emotions felt by the victims of nonphysical violence in Gerberich et al.'s (2011) Minnesota educator study. Furthermore, Bauer (2008), employing Social Capital Theory, included a variable which measured fear as part of a larger composite predictor in her study, but it was not significant.

Relevant to External Policies on Disciplining Students in the current study, Han (2011) examined school principals' approaches to discipline, including the use of corporal punishment. She pointed out that the theoretical underpinning of an approach to delinquency that uses corporal punishment as a means of discipline would be likely classified under Rational Choice Theory. By contrast, the theoretical underpinning of an approach to delinquency that does not use physical disciplinary methods would be likely classified under Positivist Theory. Remarkably, Han found that of those principals who had the same number of disciplinary problems in their schools, the principals who used corporal punishment believed that there was less school disorder in their buildings, even though in actuality there was not. As was noted earlier in this paper, the selection of an appropriate theory from which to work is of great importance.

Regarding Hypothesis Five, the theoretical framework again was generally supported; this time by a model which had a large effect size. Unlike in the previous model, the factor construct of Fear was significant in the full model, however, External Policies on Disciplining Students still was not. Thus, this one factor—even when it is a limitation upon schools' efforts to reduce or prevent crime—still does not predict TVS.

One explanation may be that even though discipline policies in general are very important to proper school functioning, at the specific building level external policies are simply not predictive of frequencies of student mistreatment of teachers (i.e., TVS). That External Policies on Disciplining Students was identified under the environment-related portion of Triadic Reciprocal Determinism of Social Cognitive Theory, as implemented in the present investigation, should not be overlooked. This finding, by itself, is of considerable theoretical importance.

Theoretical contributions of the research. An additional aspect of Hypothesis Five, beyond that which was mentioned above, was that the current study addressed the topic of context of behavior. This included school level of instruction, school enrollment size, and school urbanicity. These three contextual factors were important to the current investigation because they were related to school crime in Miller's (2003) study.

In prior research, which sampled about 5,000 Kentucky public teachers, May, Johnson, Chen, Wallace, and Ricketts (2010) found that secondary teachers were victimized significantly more by parents than were elementary teachers, but that school size was not a significant predictor. The finding in the current study that elementary and combined schools, but not middle, had significantly less frequent TVS than high schools—for schools with average limitations on their efforts to reduce or prevent crime and with average levels of Student Academic Orientation—suggests that parents and teachers need to be exceptionally skillful in their leadership responsibilities with these older secondary school students. Developmentally, young people in these age ranges need to become more self-reliant, assertive, and independent thinkers; however, they also

still need leadership and guidance from the responsible adults under whose supervision they spend most of their days—that is, their teachers and their parents.

This study found that elementary schools have less frequent TVS than secondary schools, smaller schools less than larger, and rural schools less than urban. Findings from the current study generally reaffirm the position that to fully understand a behavior, recognition of the role that the broader context in which that behavior occurs is imperative. Acknowledgment of this reality concurs with the essence of Social Cognitive Theory as a useful theoretical basis for understanding human behavior.

These findings contribute to Social Cognitive Theory in two ways. First, factors of behavior, person, and environment were able to be established in the current study. Second, using Triadic Reciprocal Determinism of Social Cognitive Theory, relationships among these three elements were able to be analyzed in the ongoing quest to alleviate the problem of TVS.

In summary of theoretical implications, TVS, a phenomenon identified as a behavior-related factor construct under Triadic Reciprocal Determinism of Social Cognitive Theory in the present investigation, is a problem for most, but not all, U.S. public schools. Frequencies of TVS vary greatly across U.S. public schools. Although many schools never experience TVS at all, an unfortunate few experience it daily and weekly; many experience it monthly or occasionally. The current study revealed that Social Cognitive Theory is a useful theoretical basis from which to conceptualize the problem of TVS and its predictors. The theory takes into account not only the behavior, but also the person engaging in the behavior, as well as the environment in which the behavior occurs.

Policy Implications

Following are five recommendations for policy based on findings from the current study. They are related to behavior, environment, person, and context.

Regarding pupil behavior: This study found evidence of a problem of teacher victimization by students. TVS hurts teachers. Their physical and psychological health are jeopardized when they are victimized. These teachers are at risk for increased stress, presenteeism, burnout, and compassion fatigue—all serious issues. Furthermore, their professional reputations are put at risk of damage.

Based on results of this study, and evidence presented earlier in this paper from prior researchers whose work found that young people are susceptible to adult modeling of aggressive behavior, a recommendation is offered. *A national level public service media campaign directed toward children, adolescents, and their parents should be initiated.* Its purpose should be to counteract the egregious glamorization of interpersonal disrespect and interpersonal violence to which many young people in our nation are exposed daily. This public service campaign should be differentiated by developmental appropriateness relative to the young people's various age ranges.

Regarding the environment in which TVS occurred: This study found evidence of a relationship between increased limitations on schools' efforts to reduce or prevent crime in their buildings and higher frequencies of TVS. Two of these limitations were particularly problematic. One involved lack of parental and teacher support for school policies, as well as inconsistent application of school policies by faculty and staff members. This example of disunity set by the adults lays down a bad precedent of disobliging conduct for students. They will be less likely to follow school rules, policies,

and procedures if their own parents and teachers are not supportive of these school policies, and if the parents and teachers are not cooperative with each other. If children are susceptible to the modeling of aggressive behavior from an adult stranger as was reported from prior research, then surely they will be influenced by unsupportive behaviors modeled by their parents, teachers, and staff members. Disregard for school policies can lead to behavior-related problems such as TVS. *A building level policy recommendation is to seek and attain parent, faculty, staff, and student input concerning school rules, policies, and procedures.* This is practically guaranteed to be an arduous task. However, if each segment of the school society has input, then they will be more amenable to following the school rules, policies, and procedures. Concomitant to this, a thorough explanation of the school rules, policies, and procedures must be available to all, particularly those with limited understanding of the English language. This information should be posted on the school website and paper copies should be available. A rationale for the rules, policies, and procedures should be offered. Clear consequences for following, or not following, them should be included.

A second limitation on schools' efforts to reduce or prevent crime in their buildings involved inadequate funds, lack of teacher training in classroom management, and lack of alternative programs for disruptive students. Therefore, a national level policy recommendation is offered. *It is imperative that financial and human resources be allocated such that every public school teacher in the U.S. has adequate training in classroom management.* This is de rigueur and non-negotiable. With proper training, it is almost guaranteed that fewer referrals for removal of students exhibiting disruptive behavior will be made and fewer alternative placements will be needed. When disruptive

student behavior interferes with well-planned and well-delivered instruction, then everyone loses. Conversely, when students are attentive and engaged in learning activities resulting from effective instruction, then everyone benefits.

Regarding the students in this study who engaged in TVS: Evidence was found that increased Student Academic Orientation was associated with less frequent TVS. Students who are engaged in committing TVS are not simultaneously learning optimally. These two behaviors are incompatible. By extension, other students in proximity to these malicious behaviors also are not learning optimally due to the disruption to the instructional environment which these behaviors cause. In addition, these students may be at risk for secondary TVS trauma from exposure to their teachers being victimized. At the middle and high school building level, a policy recommendation is offered. *Continually emphasize and reinforce the academic mission of the school.* Every adult who enters into the school building should be, in the broadest sense of the word, a teacher. Each adult should be a model of appropriate behavior. (If they are not, why are they even in the building?) Beyond this, however, the adults should model their own approach to learning, in general, and academic learning, in particular. Time should be allocated throughout the school year permitting opportunities for students, faculty, and in some cases staff to collaborate as learners, on projects of an academic nature, which interest them. Presently, teachers who coach sports or sponsor student activities clubs already approximate this sort of behavior. Some of the students whom they coach or sponsor, might not even be in any of these teachers' classes. However, these students still receive benefit of these teachers' expertise and enthusiasm through participation in self-selected sports and activities clubs.

This building level policy which is being proposed in the current study extends collaborative student and teacher learning opportunities to other more academically oriented endeavors—or to projects that are not specifically academically oriented, but still require the application of academic skills. It could be described not so much as teacher-centered or even student-centered, but rather as learning-centered.⁵ Thus, the distinction between the traditional roles of teacher and student are secondary to the role that everyone in the building should have, which is to be an academically oriented learner. There are several potential benefits to be derived from this approach. One important benefit is the increase in student academic orientation as a result of the policy of pervasive emphasis, throughout the school building, on academic learning. There are potential ancillary benefits arising from this policy. One is that teachers and students would get to know each other better and rapport would develop. Thus, it is posited that frequencies of TVS would decline because students are generally less likely to victimize a person whom they like, trust, and respect. Additionally, less academically inclined

⁵ A brief anecdote illustrates the point. Years ago, when I was in the classroom I, along with my principal, wrote a (very small) grant request for funding to purchase some calculators which at the time could do an amazing thing; they could graph equations! Although not particularly impressive by today's standards, this was fascinating technology for the time. I wound up working on an activity with a small group of kids, middle school students—none of whom were in my classes. They assembled small balsa wood airplanes and then had fun competing to see whose plane could fly farthest using different techniques, airplane modifications, etc. As part of the activity, they took measurements, made calculations, and began to learn how to employ this new technology which, at that time, many high school students had not even used. The point is that the teacher (in this case, me) was a collaborator in the learning experience along with the students. By endeavoring together on an academically oriented project where the teacher modeled (pun intended; they were model airplanes) the behavior of a learner (I had to begin to learn how to use these calculators just as the kids did), the teacher was no longer just another transmitter of knowledge. This endeavor, I opine, helped to increase student academic orientation of those kids at that time. Additionally, the experience helped to build rapport between a teacher in the building and students who otherwise would not have had much academically oriented interaction.

students would have the opportunity to learn how to learn from other more academically oriented colleagues, which would include other students as well as the teacher, all of whom are collaborating on a common task.

Regarding context: School size. Concerning school size, the current study offers no specific national level policy regarding student enrollment numbers. *The policy for specific schools sizes should be driven by the specific needs of the students served by those schools.* From the current study, it can be stated confidently that for average schools—those with average limitations on their efforts to reduce or prevent crime and with average student academic orientation—those buildings with smaller enrollments experienced less frequent TVS. This finding, however, does not speak to circumstances where schools have below average limitations and above average student academic orientation. Larger enrollments under these circumstances may be appropriate.

Limitations of the Current Study

The findings of this study should generalize back to the larger population from which they were derived because of the sample's size and representativeness of the population of U.S. public schools. However, findings from the current study may be limited for several reasons. First, causation cannot be claimed. Cross-sectional data are like a snapshot frozen in time and—as with any appraisal—the information is only valid for the time period that it measured. It is static. To the extent that conditions today are like conditions during data collection in 2008, then the findings are still valid. To the extent that conditions have changed, then the findings are less valid. Thus, this cross-sectional study was more like a snapshot photo. A longitudinal study is more like a movie, and it would take a longitudinal study to consider claims of causation. Also, with

Bandura's Triadic Reciprocal Determinism the arrows among the three elements of Behavior, Person, and Environment go in both directions; however, in the current study the arrows in the paths of influence only go in one direction, toward TVS. This was a major limitation of the present investigation. Therefore, no causality was claimed.

This study was limited by some of the typical shortcomings of any survey research. A major limitation of the design was that principals or their designees—the survey respondents—made inferences about other people's (mostly students') cognitions; that is their thoughts, likes and dislikes, as well as their behaviors. There was the potential for bias in the self-reported responses of these survey takers. Concerning the survey instrument, some of the wording of the items was too imprecise and consequently vague. For example, what is *Fear of district or state reprisal*? Measurements based on vague definitions cannot be as precise and stable as one would want. Also, whenever measurements are made, there is the possibility of errors being committed in responding. Lindle (2008) remarked that "inaccurate or incomplete information on school safety can have a far-reaching effect" (p. 22). Furthermore, when surveys are conducted, the questions cannot perfectly measure the construct which the surveyors are trying to tap. Thus, there is a built-in discrepancy between that which was measured and that which was purported to be measured which is bound to occur in this type of research.

Another problem was discrepant definitions of the same or similar phenomena found in the professional literature. For example, the term violence in the literature has different meanings to different researchers. Also, some the operational definitions in the current study were confusing due to the transformations which were employed.

Regarding analyses, skew and kurtosis were problems. However, the analytical techniques used in the study were robust to these challenges. Additionally, the intercepts and slopes in the analyses were fixed; there were no random effects. Thus, one can speak only in terms of averages. For instance, elementary schools with average limitations on their efforts to reduce or prevent crime arising from Lack of Support, Fear, Lack of Resources, and External Policies on Disciplining Students and with average Student Academic Orientation tend to have less frequent occurrences of TVS than do high schools under the same conditions. Finally, in the current study, almost one-third of the variance in TVS was accounted for by the full model which was analyzed. That is a large effect size; however, this of course means that slightly over two-thirds of the variance was still left unexplained.

Recommendations for Future Research

If TVS is on the nonphysical end of a violence continuum that has physical violence on the other end, then this leads to additional research questions vis-à-vis physical violence. For instance, Do higher frequencies of TVS predict increased threats of teacher assaults by students? Do higher frequencies of TVS predict increased actual teacher assaults by students? These questions could be answered with data from the SSOCS. Also, it would have been helpful to have had more person-related information, especially qualitative information. Additional research questions could include, Do students like going to school here? Do students work hard at their academic tasks? What are the post-high school plans, if any, regarding education or training of those students not likely to attend college (e.g., trade schools, military service, etc.)? These types of survey items are not available on the SSOCS. Information about a school environment

wherein student insubordination is a problem would be informative. Additional research questions could include, What is the relationship between insubordination by students and Student Academic Orientation? Does student insubordination, in combination with covariates and factors from the current study, predict frequency of TVS? These questions could be answered with data from the SSOCS.

School contextual factors were an important part of the current study. Two methodological refinements which would require a restricted-use license would be to use actual numbers, not ordered categories, of student enrollment. Also, use actual grade levels, not ordered categories, of levels of instruction.

An ideal next step would be to employ longitudinal techniques, but these data are not available from the SSOCS. Since the same schools are not surveyed repeatedly over the years, another approach would be to use matched samples—based upon the three school contextual factors. One could then see if over time there were stability or change in the relationships among the predictors and the outcome variable across the administrations of the survey (i.e., administration years 2000, 2004, 2006, 2008, and 2010).

Chapter Summary

A discussion of findings from this study's analysis of person-related, environment-related, and contextual factors associated with a behavior-related factor of TVS was presented in this chapter. Support for the measurement models, which included the first set of hypotheses, was discussed first. Support for the structural models, which included the second through fifth set of hypotheses, was discussed next. Implications of the findings concerning theory, as well as policy and practice, were put forth.

Limitations of this study were elaborated. Recommendations for future research were offered.

The current investigation contributes to the present knowledge base of the understudied problem of TVS. To this researcher's knowledge, no other study just like the current one has been conducted. Its unique features include the specific factors which were identified and the subsequent relationships which were found among them, while employing estimates generated from a nationally representative sample of U.S. public schools.

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Appendices

Appendix A

Table A1

Operational Definitions

Factor Label	3 Items	Definition- How often the following types of problems occur at school	Transformed Scores	Interpretation
<i>Teacher Victimization by Students^a</i>	C0380	How often student verbal abuse of teachers	TLG10_Reflect_Sum_FAC_TVS (TVS)	Outcome factor; HIGHER TVS scores (i.e., transformed scores) indicate GREATER FREQUENCY of Teacher Victimization by Students
	C0382	How often widespread disorder in classrooms		
	C0384	How often student acts of disrespect for teachers-not verbal abuse		
Factor Label	3 Items	Definition- Extent to which the following factors limit your school's efforts to reduce or prevent crime	Transformed Scores	Interpretation
<i>Lack of Support^b</i>	C0286	Efforts limited by inadequate/lack of teacher support	TINV_Reflect_Reg_FAC_LACKSUPP (GMLSUPP)	Predictor factor; HIGHER LACKSUPP scores (i.e., transformed scores) indicate that LACKSUPP is LESS of a LIMITATION (GMLSUPP = weighted grand mean centered LACKSUPP)
	C0296	Efforts limited by inconsistent application of policies		
	C0288	Efforts limited by inadequate/lack of parent support		
Factor Label	4 Items	Definition- Extent to which the following factors limit your school's efforts to reduce or prevent crime	Transformed Scores	Interpretation
<i>Fear^b</i>	C0290	Efforts limited by fear of student retaliation	TINV_Reflect_Reg_FAC_FEAR (GMFEAR)	Predictor factor; HIGHER FEAR scores (i.e., transformed scores) indicate that FEAR is LESS of a LIMITATION (GMFEAR = weighted grand mean centered FEAR)
	C0284	Efforts limited by parental complaints		
	C0292	Efforts limited by fear of litigation		
	C0298	Efforts limited by fear of district or state reprisal		

Factor Label	3 Items	Definition -Extent to which the following factors limit your school's efforts to reduce or prevent crime	Transformed Scores	Interpretation
<i>Lack of Resources^b</i>	C0282	Efforts limited by inadequate/lack of alternative placement	TSQRT_Reflect_Reg_FAC_LACKRESO (GMLRESO)	Predictor factor; HIGHER LACKRESO scores (i.e., transformed scores) indicate that LACKRESO is MORE of a LIMITATION (GMLRESO = weighted grand mean centered LACKRESO)
	C0294	Efforts limited by inadequate funds		
	C0280	Efforts limited by inadequate/lack of teacher training		
Factor Label	3 Items	Definition -Extent to which the following factors limit your school's efforts to reduce or prevent crime	Transformed Scores	Interpretation
<i>External Policies on Disciplining Students^b</i>	C0300	Efforts limited by fed policies/special education	TINV_Reflect_Reg_FAC_EPDS (GMEPDS)	Predictor factor; Addresses both special education and general education students; HIGHER EPDS scores (i.e., transformed scores) indicate that EPDS is LESS of a LIMITATION (GMEPDS = weighted grand mean centered EPDS)
	C0302	Efforts limited by other federal policies-not special education		
	C0304	Efforts limited by other state/district policies-not special education		
Factor Label	3 Items	Definition -Student characteristics regarding their orientation toward academic achievement	Transformed Scores	Interpretation
<i>Student Academic Orientation^c</i>	C0534	Percentage students likely to go to college	TLG10_Reflect_Reg_FAC_SAO (GMSAO)	HIGHER SAO scores (i.e., transformed scores) indicate LOWER student academic orientation (GMSAO = weighted grand mean centered SAO)
	C0536	Percentage students academic achievement important		
	C0532 REV	Percentage students ABOVE or AT 15th percentile on standardized tests ^d	Reverse coding (100 - C0532) of C0532 Percentage students below 15th percentile standardized tests	
Variable Label	<i>STRAT A</i>	Definition -Composite of Instructional Level ^e , School Enrollment Size ^f , and Locale (Urbanicity) ^g		

Notes. a. Raw Scores: 1 = Happens daily; 2 = Happens at least once a week; 3 = Happens at least once a month; 4 = Happens on occasion; 5 = Never happens. b. Raw Scores: 1 = Limits in major way; 2 = Limits in minor way; 3 = Does not limit. c. Raw Scores: 0-100%. d. Reverse coding (100 - C0532) of C0532: Percentage students below 15th percentile standardized tests. e. Instructional Level: 1 = Primary School; 2 = Middle School; 3 = High School; 4 = Combined School. f. School Enrollment Size: 1 = Less than 300; 2 = Less than 500; 3 = Less than 1000; 4 = Greater than 1000. g. Locale (Urbanicity): 1 = Urban; 2 = Suburban; 3 = Small Town; 4 = Rural.

Appendix B: Tables

Table A2

Contextual Factor Information

	Values*	Weighted Count	Weighted Percent
Level of Instruction (LOI)	1.00	49,166.405	59.2%
	2.00	15,299.743	18.4%
	3.00	11,922.517	14.4%
	4.00	6,610.566	8.0%
Student Enrollment (SIZE)	1.00	19,194.725	23.1%
	2.00	24,314.978	29.3%
	3.00	30,191.382	36.4%
	4.00	9,298.147	11.2%
School Urbanicity (LOCALE)	1.00	21,279.044	25.6%
	2.00	23,907.894	28.8%
	3.00	11,493.371	13.8%
	4.00	26,318.922	31.7%
Population Size		82,999.232	100.0%

***Level of Instruction** (school instructional level): 1 = Primary School; 2 = Middle School; 3 = High School; 4 = Combined School. **Student Enrollment** (school size): 1 = Less than 300; 2 = Less than 500; 3 = Less than 1,000; 4 = Greater than 1000. **Locale** (school urbanicity): 1 = Urban; 2 = Suburban; 3 = Small Town; 4 = Rural.

Table A3

Tests of Model Effects

Source	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
(Corrected Model)	12.655	31638.643	50.897	.000	.000
(Intercept)	1.000	2500.000	4052.239	.000	.000
LOI	2.386	5963.803	31.014	.000	.004
SIZE	2.632	6580.067	9.386	.000	.000
LOCALE	2.986	7465.589	7.743	.000	.000
gmSAO	1.000	2500.000	70.628	.000	.000
gmLSUPP	1.000	2500.000	4.107	.043	.043
gmFEAR	1.000	2500.000	4.944	.026	.026
gmLRESO	1.000	2500.000	54.527	.000	.000
gmEPDS	1.000	2500.000	1.219	.270	.270

Table A4

Parameter Estimates

Parameter	Estimate	Std. Error	95% Confidence Interval		Design Effect	Square Root Design Effect
			Lower	Upper		
(Intercept)	.478	.027	.425	.531	1.712	1.308
[LOI=1.00]	-.034	.028	-.089	.021	2.461	1.569
[LOI=2.00]	.088	.028	.034	.142	1.967	1.402
[LOI=3.00]	.084	.027	.031	.138	1.792	1.339
[LOI=4.00]	.000	.	.	.	.	.
[SIZE=1.00]	-.110	.020	-.149	-.070	1.406	1.186
[SIZE=2.00]	-.076	.018	-.112	-.041	1.227	1.108
[SIZE=3.00]	-.038	.015	-.069	-.008	1.018	1.009
[SIZE=4.00]	.000	.	.	.	.	.
[LOCALE=1.00]	.080	.018	.044	.116	2.169	1.473
[LOCALE=2.00]	.021	.017	-.013	.054	2.016	1.420
[LOCALE=3.00]	.017	.020	-.023	.057	2.094	1.447
[LOCALE=4.00]	.000	.	.	.	.	.
GMSAO	.320	.038	.245	.394	1.894	1.376
GMLSUPP	-.057	.028	-.111	-.002	1.808	1.345
GMFEAR	-.061	.027	-.115	-.007	1.836	1.355
GMLRESO	.183	.025	.134	.232	1.932	1.390
GMEPDS	-.027	.025	-.076	.021	2.010	1.418

Table A5

Estimated Marginal Means: Level of Instruction

Level of Instruction	Mean	Std. Error	95% Confidence Interval	
			Lower	Upper
1.00	.4179	.01036	.3976	.4382
2.00	.5394	.00823	.5233	.5555
3.00	.5357	.00918	.5177	.5537
4.00	.4516	.02599	.4007	.5026

Note. Covariates appearing in the model are fixed at the following values:
 GMSAO = .0000; GMLSUPP = .0000; GMFEAR = .0000; GMLRESO = .0000; GMEPDS = .0000

Table A6

Contrast Estimates: Level of Instruction

Level of Instruction	Contrast Estimate	Hypothesized Value	Difference (Estimate - Hypothesized)	Std. Error	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
Simple Contrast									
Level 1.00 vs. Level 3.00	-.118	.000	-.118	.015	1.000	2500.000	62.141	.000	.000
Level 2.00 vs. Level 3.00	.004	.000	.004	.012	1.000	2500.000	.094	.759	1.000
Level 4.00 vs. Level 3.00	-.084	.000	-.084	.027	1.000	2500.000	9.515	.002	.006

Note. Reference Category = 3.00

Table A7

Estimated Marginal Means: Student Enrollment

Student Enrollment	Mean	Std. Error	95% Confidence Interval	
			Lower	Upper
1.00	.4326	.01567	.4018	.4633
2.00	.4660	.01283	.4408	.4911
3.00	.5039	.01164	.4811	.5268
4.00	.5421	.01316	.5164	.5679

Note. Covariates appearing in the model are fixed at the following values: GMSAO = .0000; GMLSUPP = .0000; GMFEAR = .0000; GMLRESO = .0000; GMEPDS = .0000

Table A8

Individual Test Results: Student Enrollment

Student Enrollment Simple Contrast	Contrast Estimate	Hypothesized Value	Difference (Estimate - Hypothesized)	Std. Error	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
Level 1.00 vs. Level 4.00	-.110	.000	-.110	.020	1.000	2500.000	29.026	.000	.000
Level 2.00 vs. Level 4.00	-.076	.000	-.076	.018	1.000	2500.000	17.699	.000	.000
Level 3.00 vs. Level 4.00	-.038	.000	-.038	.015	1.000	2500.000	6.107	.014	.041

Note. Reference Category = 4.00

Table A9

Estimated Marginal Means: School Urbanicity

School Urbanicity	Mean	Std. Error	95% Confidence Interval	
			Lower	Upper
1.00	.5369	.01365	.5101	.5637
2.00	.4773	.01200	.4537	.5008
3.00	.4737	.01762	.4391	.5083
4.00	.4568	.01093	.4353	.4782

Note. Covariates appearing in the model are fixed at the following values:
 GMSAO = .0000; GMLSUPP = .0000; GMFEAR = .0000; GMLRESO = .0000;
 GMEPDS = .0000

Table A10

Individual Test Results: School Urbanicity

School Urbanicity	Contrast Estimate	Hypothesized Value	Difference (Estimate - Hypothesized)	Std. Error	df1	df2	Adjusted Wald F	Sig.	Bonferroni Sig.
Simple Contrast									
Level 2.00 vs. Level 1.00	-.060	.000	-.060	.016	1.000	2500.000	13.768	.000	.001
Level 3.00 vs. Level 1.00	-.063	.000	-.063	.021	1.000	2500.000	9.336	.002	.007
Level 4.00 vs. Level 1.00	-.080	.000	-.080	.018	1.000	2500.000	18.967	.000	.000

Note. Reference Category = 1.00

Appendix C: School Survey on Crime and Safety
(Selected Items)

Limitations on Crime Prevention

13. To what extent do the following factors limit your school's efforts to reduce or prevent crime?

☛ Check one response on each line.

		Limits in major way	Limits in minor way	Does not limit
a.	Lack of or inadequate teacher training in classroom management 280	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
b.	Lack of or inadequate alternative placement/programs for disruptive students 282	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
c.	Likelihood of complaints from parents 284	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
d.	Lack of teacher support for school policies 286	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
e.	Lack of parental support for school policies 288	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
f.	Teachers' fear of student retaliation 290	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
g.	Fear of litigation 292	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
h.	Inadequate funds 294	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
i.	Inconsistent application of school policies by faculty or staff 296	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
j.	Fear of district or state reprisal 298	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
k.	Federal, state, or district policies on disciplining special education students* 300	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
l.	Federal policies on discipline and safety other than those for special education students* 302	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>
m.	State or district policies on discipline and safety other than those for special education students* 304	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>

Disciplinary Problems and Actions

20. To the best of your knowledge, how often do the following types of problems occur **at your school***?

🗳 Check one response on each line.

		Happens daily	Happens at least once a week	Happens at least once a month	Happens on occasion	Never happens
a. Student racial/ethnic tensions	374	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Student bullying	376	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. Student sexual harassment* of other students	378	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. Widespread disorder in classrooms	382	1 <input checked="" type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input checked="" type="checkbox"/>	4 <input checked="" type="checkbox"/>	5 <input checked="" type="checkbox"/>
e. Student verbal abuse of teachers	380	1 <input checked="" type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input checked="" type="checkbox"/>	4 <input checked="" type="checkbox"/>	5 <input checked="" type="checkbox"/>
f. Student acts of disrespect for teachers other than verbal abuse	384	1 <input checked="" type="checkbox"/>	2 <input checked="" type="checkbox"/>	3 <input checked="" type="checkbox"/>	4 <input checked="" type="checkbox"/>	5 <input checked="" type="checkbox"/>
g. Gang* activities	386	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
h. Cult or extremist group* activities	388	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

School Characteristics: 2007-08 School Year

26. What is your best estimate of the percentage of your current students who meet the following criteria?

🍎 If none, please mark (X) the box.

a. Below the 15th percentile on standardized tests

Percent of students

532 %
0 None

b. Likely to go to college after high school

534 %
0 None

c. Consider academic achievement to be very important

536 %
0 None

Appendix D: Curriculum Vitae

CURRICULUM VITAE

Benjamin G. Washburn, Jr.

Present Enrollment

Candidate for the degree of Doctor of Education (Ed.D.), Special Education, The Johns Hopkins University, School of Education, Baltimore, Maryland

Earned Degrees/Certificates in Education

Certificate of Advanced Graduate Study (C.A.G.S.), Special Education, The Johns Hopkins University, School of Continuing Studies, Graduate Division of Education, Baltimore, Maryland, 1996

Master of Education (M.Ed.), Special Education, Loyola College in Maryland, Education Department, Baltimore, Maryland, 1993

Earned Degrees in Psychology

Master of Science in Developmental Psychology (M.S.D.P.), The Johns Hopkins University, Zanvyl Krieger School of Arts and Sciences, Baltimore, Maryland, 2004

Bachelor of Arts (B.A.), Psychology, Loyola College in Maryland, Psychology Department, Baltimore, Maryland, 1981

Other Earned Degrees/Diplomas

Associate in Arts (A.A.), Social and Behavioral Sciences, Essex Community College, Essex, Maryland, 1979

Diploma, McDonogh School, Owings Mills, Maryland, 1976

Teaching Certification: Maryland State Department of Education

Advanced Professional Certificate (APC)

Generic Special Education, grades 1-8

Generic Special Education, grades 6-Adult

Reading Teacher

Membership

International Dyslexia Association, Maryland Branch